

=> d his ful

FILE 'REGISTRY' ENTERED AT 17:18:19 ON 14 OCT 2004

E DAPTOMYCIN/CN

L1 1 SEA ABB=ON DAPTOMYCIN/CN
E A54145/CN
E A 54145/CN

FILE 'HCAPLUS' ENTERED AT 17:18:48 ON 14 OCT 2004

L2 2349 SEA ABB=ON ?LIPOPEPTID? OR L1 OR ?DAPTOMYCIN? OR A54145 OR
A(W)54145
L3 100 SEA ABB=ON L2 AND (?DISSOLV? OR ?CRYSTAL? OR ?PRECIP?)
L4 10 SEA ABB=ON L3 AND (?COLLECT? OR DRY? OR ?STOR?)
L5 6 SEA ABB=ON L4 AND (?STABIL? OR ?STABL? OR ?AMORPH? OR ?MANUF?
OR ?PROCES? OR ?PROCEED?)
L6 2 SEA ABB=ON L4 AND (?METHOD? OR ?TECHNIQ?)
L7 10 SEA ABB=ON L4 OR L5 OR L6

FILE 'MEDLINE, BIOSIS, EMBASE, WPIDS, JICST-EPLUS, JAPIO' ENTERED AT
17:21:10 ON 14 OCT 2004

L8 12 SEA ABB=ON L7
L9 9 DUP REMOV L8 (3 DUPLICATES REMOVED)

FILE 'HCAPLUS' ENTERED AT 17:39:30 ON 14 OCT 2004

L10 0 SEA ABB=ON L7 AND LOW?(W)MOL?(W)?WEIGHT?(W)?ALCOHOL?
L11 0 SEA ABB=ON L7 AND ((MOL? OR ?MOLECULAR?) (W) (?WEIGHT? OR
WT)) (L)?ALCOHOL?
L12 3 SEA ABB=ON L7 AND ?ALCOHOL?
L13 1 SEA ABB=ON L7 AND ?POLYHYDRIC?
L14 10 SEA ABB=ON L7 OR L12 OR L13

FILE 'MEDLINE, BIOSIS, EMBASE, WPIDS, JICST-EPLUS, JAPIO' ENTERED AT
17:41:45 ON 14 OCT 2004

L15 4 SEA ABB=ON L9 AND (ALCOHOL? OR POLYHYDRIC?)
L16 9 SEA ABB=ON L9 OR L15

* For this search, I searched on "alcohol" +
"polyhydric" within the same hits from your
other search ([REDACTED]) and highlighted
those terms in the citations where they
showed up.

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FILE 'REGISTRY' ENTERED AT 17:18:19 ON 14 OCT 2004

E DAPTOMYCIN/CN

L1 1 SEA ABB=ON DAPTOMYCIN/CN

E A54145/CN

E A 54145/CN

FILE 'HCAPLUS' ENTERED AT 17:18:48 ON 14 OCT 2004

L2 2349 SEA ABB=ON ?LIPOPEPTID? OR L1 OR ?DAPTOMYCIN? OR A54145 OR
A(W) 54145

L3 100 SEA ABB=ON L2 AND (?DISSOLV? OR ?CRYSTAL? OR ?PRECIP?)

L4 10 SEA ABB=ON L3 AND (?COLLECT? OR DRY? OR ?STOR?)

L5 6 SEA ABB=ON L4 AND (?STABIL? OR ?STABL? OR ?AMORPH? OR ?MANUF?
OR ?PROCES? OR ?PROCED?)

L6 2 SEA ABB=ON L4 AND (?METHOD? OR ?TECHNIQ?)

L7 10 SEA ABB=ON L4 OR L5 OR L6 *10 citz from CH Plus*

FILE 'MEDLINE, BIOSIS, EMBASE, WPIDS, JICST-EPLUS, JAPIO' ENTERED AT
17:21:10 ON 14 OCT 2004

L8 12 SEA ABB=ON L7

L9 9 DUP REMOV L8 (3 DUPLICATES REMOVED)

*9 citz from other
d.b.'s*

Kosar 10/024,405

13/10/2004

=> d ibib abs ind l4 1-1

L4 ANSWER 1 OF 1 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2002:555304 HCAPLUS
DOCUMENT NUMBER: 137:94012
TITLE: Methods for preparing purified **daptomycin**
INVENTOR(S): Keith, Dennis; Govardhan, Chandrika;
Khalaf, Nazer
PATENT ASSIGNEE(S): Cubist Pharmaceuticals, Inc., USA; Altus Biologics
Inc.
SOURCE: PCT Int. Appl., 41 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002056829	A2	20020725	WO 2001-US48887	20011217
WO 2002056829	A3	20030327		
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW			
RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
US 2003045678	A1	20030306	US 2001-23517	20011217
US 2003045484	A1	20030306	US 2001-24701	20011217
EP 1383794	A2	20040128	EP 2001-270136	20011218
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR			

PRIORITY APPLN. INFO.:
US 2000-256268P P 20001218
US 2001-274741P P 20010309
US 2001-340525P P 20011213
US 2001-341315P P 20011213
WO 2001-US49167 W 20011218

AB The invention relates to methods of providing crystalline and crystal-like forms of **daptomycin**, a lipopeptide antibiotic with potent bactericidal activity against gram-pos. bacteria, including strains that are resistant to conventional antibiotics. The purification of **daptomycin** comprises the steps of providing an amorphous form of **daptomycin** and crystallizing the **daptomycin** from a crystallization solution comprising a cation from a salt, a buffer, an organic precipitant, and a low mol. weight alc. **Daptomycin** is available from a fermentation culture of *S. roseosporus*. Thus, **daptomycin** (200 mg, 97.1 % pure) was dissolved in 2.54 mL water and the solution sequentially mixed in order with 10.0 mL methanol, 0.78 mL 1 M calcium acetate (pH 6.0), 9.50 mL propylene glycol and 2.20 mL 50 % (w/v) PEG 4000 to give a final volume of 25.02 mL. The mixture was tumbled at room temperature for 10-14 h in a hematol.

mixer (Fischer) to form **daptomycin** crystals which were urchin-like and had a purity of 98.37 % .

IC A61K

CC 34-3 (Amino Acids, Peptides, and Proteins)
Section cross-reference(s): 10, 16, 75

ST **daptomycin** cryst purifn
IT Birefringence
Powder x-ray diffractometry
(methods for preparing purified crystalline **daptomycin**)
IT Polyoxyalkylenes, uses
RL: NUU (Other use, unclassified); USES (Uses)
(methods for preparing purified crystalline **daptomycin**)
IT Photography
(photomicrog.; methods for preparing purified crystalline **daptomycin**)
IT 103060-53-3P, **Daptomycin**
RL: BPN (Biosynthetic preparation); PRP (Properties); PUR (Purification or recovery); BIOL (Biological study); PREP (Preparation)
(methods for preparing purified crystalline **daptomycin**)
IT 56-81-5, Glycerol, uses 57-55-6, Propylene glycol, uses 67-56-1, Methanol, uses 67-63-0, Isopropanol, uses 75-65-0, tert-Butyl alcohol, uses 107-21-1, Ethylene glycol, uses 110-63-4, 1,4-Butanediol, uses 9004-74-4, Polyethylene glycol monomethyl ether 25322-68-3, Polyethylene glycol
RL: NUU (Other use, unclassified); USES (Uses)
(methods for preparing purified crystalline **daptomycin**)

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L1 1 SEA FILE=REGISTRY ABB=ON DAPTOMYCIN/CN
L2 2349 SEA FILE=HCAPLUS ABB=ON ?LIPOPEPTID? OR L1 OR ?DAPTOMYCIN? OR
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L3 100 SEA FILE=HCAPLUS ABB=ON L2 AND (?DISSOLV? OR ?CRYSTAL? OR
?PRECIP?)
L4 10 SEA FILE=HCAPLUS ABB=ON L3 AND (?COLLECT? OR DRY? OR ?STOR?)
L5 6 SEA FILE=HCAPLUS ABB=ON L4 AND (?STABIL? OR ?STABL? OR
?AMORPH? OR ?MANUF? OR ?PROCES? OR ?PROCED?)
L6 2 SEA FILE=HCAPLUS ABB=ON L4 AND (?METHOD? OR ?TECHNIQ?)
L7 10 SEA FILE=HCAPLUS ABB=ON L4 OR L5 OR L6
=> d ibib abs 17 1-10

L7 ANSWER 1 OF 10 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2004:351618 HCAPLUS

DOCUMENT NUMBER: 140:362560

TITLE: Heat-generating compositions containing zeolites,
cosmetics containing them, skin care **method**,
and **method** for dispersing zeolites

INVENTOR(S): Yoneda, Tadashi; Furuya, Kazuo

PATENT ASSIGNEE(S): Showa Denko K. K., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 17 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2004131413	A2	20040430	JP 2002-296883	20021010
PRIORITY APPLN. INFO.:			JP 2002-296883	20021010
OTHER SOURCE(S):	MARPAT 140:362560			

AB The comps. contain (A) zeolites, (B) dihydric alcs., (C) polyhydric alcs. having ≥ 3 OH groups, (D) alkaline earth metal hydroxides, (E) acids, and optionally (F) surfactants and (G) oily components. The cosmetics, useful for massage, cleansing, pack, etc., contain the comps., and the skin care **method** is performed using the cosmetics. Also claimed is a **method** to disperse zeolites in a substantially nonaq. medium, wherein a mixture of (D), (C), and (E) capable of **dissolving** in (C) is added to a mixture of (A) and (B) and/or (C). Zeolite 4A 20, polyethylene glycol 38, 1,3-butylene glycol 10, glycerin 24, Ca(OH)₂ 3, H₃PO₄ 3, surfactin Na 2 g were mixed to give white paste, which was **stored** at room temperature for 7 days to maintain uniform appearance.

L7 ANSWER 2 OF 10 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2003:165085 HCAPLUS

DOCUMENT NUMBER: 138:221844

TITLE: Preparation of peptide lipid compounds

INVENTOR(S): Yamada, Akihiro; Yoshinaga, Koji

PATENT ASSIGNEE(S): Japan Science and Technology Corporation, Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 6 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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JP 2003064095 A2 20030305 JP 2001-255576 20010827
PRIORITY APPLN. INFO.: JP 2001-255576 20010827
OTHER SOURCE(S): MARPAT 138:221844

AB Peptide lipid compds. of formula $R1-C_nH_{2n}-CONH-R2-CO_2-C_mH_{2m+1}$ [$R1 = HO, CO_2H, halo, N+X-Hi(C_jH_{2j}OH)_k(Me)_3-i-k$ (wherein $H =$ halogen atom; $i = 0-3$; $k = 0,1$; $j = 2-4$; provided that $i+k \leq 3$); $R2$ contains a continuous sequence of 3-6 leucines and optionally 1 or 2 other amino acid on the both ends of the leucine sequence; $n = 2-12$; $m = 12-14$] having $R1$ as the hydrophilic moiety and C_mH_{2m+1} as the hydrophobic moiety are prepared. These peptide lipids are useful for biodegradable films or in adhesives for fluoro resins. Thus, 1.04 g Boc-Leu-Leu-Leu-OH and 1.06 g L-glutamic acid didodecyl ester hydrochloride were **dissolved** in **dry** THF, treated with 0.25 g **dry** Et₃N and then slowly a solution of 0.40 g di-Et cyanophosphoridate (PEPC) in 30 mL THF with stirring under ice-cooling, stirred for a while under ice-cooling and at room temperature for

4 days while covering the reaction mixture with aluminum foil to give, after workup, 85% Boc-Leu-Leu-Leu-Gln-(OC₁₂H₂₅)₂ (I) as a colorless solid. I (1.87 g) was **dissolved** in 10 mL CHCl₃, slowly treated dropwise with 13.14 g 25% HBr/AcOH under ice-cooling, stirred at room temperature for 5

h to give, after workup, 70.1% H-Leu-Leu-Leu-Gln-(OC₁₂H₂₅)₂ (II). II (0.60 g) and 0.19 g 11-bromoundecanoic acid were **dissolved** in 20 mL THF, treated with 0.08 g **dry** Et₃N and then slowly a solution of 0.14 g di-Et cyanophosphoridate (PEPC) in 20 mL THF with stirring under ice-cooling, stirred for a while under ice-cooling and at room temperature for

4 days while blocking light from the reaction mixture with aluminum foil to give, after workup, 1.00 g BrC₁₀H₂₀CO-Leu-Leu-Leu-Gln-(OC₁₂H₂₅)₂ (III). III (1.00 g) was **dissolved** in 60 mL THF in a flask with a ground glass stopper, followed by blowing approx. 15 mL Me₃N(g) into the solution with stirring under ice-cooling, and after sealing the flask **stored** in the dark for 2 wk to give, after workup, N-[N-(11-trimethylammoniumundecanoyl)tri(L-leucyl)]-L-glutamic acid didodecyl ester bromide, i.e. Br-Me₃N+C₁₀H₂₀CO-Leu-Leu-Leu-Gln-(OC₁₂H₂₅)₂ (IV), as a colorless solid. IV was **dissolved** in CHCl₃, casted on a silicone released paper, and air-dried, followed by peering to give a paraffin-like film with high transparency and fairly regular β -sheet structure which showed bending flexibility and neither brittle fracture nor plastic deformation but broke into pieces in a few seconds when it was added to water.

L7 ANSWER 3 OF 10 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2003:151032 HCAPLUS

DOCUMENT NUMBER: 138:283548

TITLE: Detection of cyclic **lipopeptide** biomarkers from Bacillus species using atmospheric pressure matrix-assisted laser desorption/ionization mass spectrometry

AUTHOR(S): Madonna, Angelo J.; Voorhees, Kent J.; Taranenko, Nelli I.; Laiko, Victor V.; Doroshenko, Vladimir M.
CORPORATE SOURCE: Department of Chemistry, Colorado School of Mines, Golden, CO, 80401, USA

SOURCE: Analytical Chemistry (2003), 75(7), 1628-1637
CODEN: ANCHAM; ISSN: 0003-2700

PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal

LANGUAGE: English

AB A novel approach to microbial detection using atmospheric pressure matrix-assisted laser desorption/ionization with an ion trap mass

spectrometer to analyze whole cell bacteria is introduced. This new approach was tested with lyophilized spores and cultures of *Bacillus globigii* (BG) grown on agar media for 4 days or longer. At each stage of growth, it was found that biomarkers, identified as cyclic **lipopeptides** known as fengycin and surfactin, could be detected by pulsed UV laser irradiation of intact BG cells (.apprx.5 mg) **cocrystd** . with α -cyano-4-hydroxycinnamic acid. Furthermore, definitive amino acid sequence information was obtained by performing tandem mass spectrometry on the precursor ions of the cyclic **lipopeptides**. The investigation was broadened to include the examination of aerosolized BG spores **collected** from the atmospheric and directly deposited onto double-sided tape. Subsequent anal. of the recovered spores resulted in the production of mass peaks consistent with fengycin. Other *Bacillus* species were analyzed for comparison and showed mass spectral peaks also identified as originating from various cyclic **lipopeptides**. Further studies were conducted using a pulsed IR laser as the excitation source to analyze BG cells (.apprx.5 mg) suspended in a matrix of 0.03 M ammonium citrate and glycerol resulting in the production of ions characteristic of fengycin and surfactin.

REFERENCE COUNT: 25 THERE ARE 25 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 4 OF 10 HCAPLUS COPYRIGHT 2004 ACS on STN
 ACCESSION NUMBER: 2001:545525 HCAPLUS
 DOCUMENT NUMBER: 135:157672
 TITLE: Cyclic peptide compositions for nasal administration
 INVENTOR(S): Horii, Ikuo; Kobayashi, Kazuko; Shimma, Nobuo;
 Yanagawa, Akira
 PATENT ASSIGNEE(S): Basilea Pharmaceutica A.-G., Switz.
 SOURCE: PCT Int. Appl., 117 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001052894	A2	20010726	WO 2001-EP163	20010109
WO 2001052894	A3	20020131		
W:	AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG			
EP 1251827	A2	20021030	EP 2001-909587	20010109
EP 1251827	B1	20040526		
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR			
BR 2001007764	A	20021112	BR 2001-7764	20010109
JP 2003535042	T2	20031125	JP 2001-552941	20010109
AT 267582	E	20040615	AT 2001-909587	20010109
US 2001038824	A1	20011108	US 2001-765846	20010119
ZA 2002005240	A	20030929	ZA 2002-5240	20020628
PRIORITY APPLN. INFO.:			EP 2000-101057	A 20000120
			WO 2001-EP163	W 20010109

OTHER SOURCE(S): MARPAT 135:157672

AB The present invention relates to a nasal composition of physiologically active cyclic peptides and salts that are prepared by homogeneously dispersing an active cyclic peptide such as antifungal cyclic peptides (aerothricin, echinocandin analogs, pneumocandin analogs, and aureobasidin), antibacterial cyclic peptides (e.g., vancomycin, **daptomycin**), cyclosporin A, lanreotide, vapreotide, vasopressin antagonist and eptifibatide in a unique carrier. The powdery or **crystalline** carrier contains a water insoluble polyvalent metal carrier, or organic carrier having a mean particle size of 20-500 µm, in the presence or absence of an absorption enhancer and by homogeneously adsorbing onto the carrier, and its use for therapeutic treatment of disease such as systemic fungal infections by intranasal administration. The composition can be nasally administered in a powder form. Thus, 201 mg Aerothricin 133 and 599 mg CaCO₃ (mean particle size: 40-60 µm) were mixed well. Then, 200 µL water was added, and mixing was continued until the mixture became a paste and the resulting pasty solid was freeze-dried at -50°, and further dried at 300° for 3 h in vacuo. After large particles in the **dry** powder were broken into small particles, 8 mg of calcium stearate was added and the mixture was passed through 180-µm-mesh. Aerothricin 133 was synthesized by a series of steps.

L7 ANSWER 5 OF 10 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2000:814284 HCAPLUS

DOCUMENT NUMBER: 133:366419

TITLE: Lipid particles on the basis of mixtures of liquid and solid lipids and **method** for producing same for drug delivery

INVENTOR(S): Muller, Rainer Helmut; Jennings, Volkhard; Mader, Karsten; Lippacher, Andreas

PATENT ASSIGNEE(S): Pharmasol G.m.b.H., Germany

SOURCE: PCT Int. Appl., 85 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000067728	A2	20001116	WO 2000-EP4112	20000508
WO 2000067728	A3	20010809		
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
RW:	GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG			
DE 19938371	A1	20010222	DE 1999-19938371	19990809
DE 19945203	A1	20001221	DE 1999-19945203	19990921
EP 1176949	A2	20020206	EP 2000-931138	20000508
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO			
BR 2000010354	A	20020305	BR 2000-10354	20000508
TR 200103188	T2	20020422	TR 2001-200103188	20000508
JP 2002544155	T2	20021224	JP 2000-616755	20000508
ZA 2001008794	A	20020715	ZA 2001-8794	20011025

PRIORITY APPLN. INFO.:

DE 1999-19921034	A 19990507
DE 1999-19938371	A 19990809
DE 1999-19945203	A 19990921
DE 2000-10016357	A 20000331
WO 2000-EP4112	W 20000508

AB The invention relates to lipid particles which do or do not carry active agents and comprise a mixed matrix consisting of solid and liquid lipid (so-called solid/liquid particles). The inventive particles are provided with a disordered structure (**semicryst.**, mostly non-**crystalline** to **amorphous**) in the semisolid to solid condition. The invention also relates to a **method** for producing said dispersions and especially a **method** for producing highly concentrated lipid particle dispersions with a lipid content of 30 % to 95 % or a solids content of 30 % to 95 % (lipid and **stabilizer**). Said dispersions are integral particles unlike the biamphiphilic creams and/or the highly concentrated particle dispersions result in free-flowing particle dispersions when diluted with the outer phase.

L7 ANSWER 6 OF 10 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1993:603910 HCAPLUS

DOCUMENT NUMBER: 119:203910

TITLE: Synthesis and mesomorphic behavior of comb-like polymers based on **lipopeptides** with two hydrophobic chains

AUTHOR(S): Gallot, Bernard; Diao, Tiejun

CORPORATE SOURCE: Lab. Mater. Org., CNRS, Vernaison, 69390, Fr.

SOURCE: Liquid Crystals (1993), 14(4), 947-58

CODEN: LICRE6; ISSN: 0267-8292

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Polymerizable **lipopeptides** with 2 hydrophobic chains were synthesized and transformed into comb-like polymers by radical polymerization. The structure of **dry** polymerizable **lipopeptides** and comb-like polymers and their aqueous solns. was determined by x-ray diffraction.

Comb-like polymers exhibit both thermotropic and lyotropic properties.

Three types of mesomorphic structure were resolved: smectic B, smectic A, and cylindrical hexagonal. The domains of **stability** of the mesophases and the values of their structural parameters were **established**.

L7 ANSWER 7 OF 10 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1989:218763 HCAPLUS

DOCUMENT NUMBER: 110:218763

TITLE: Liquid **crystalline** phases and emulsifying properties of block copolymer hydrophobic aliphatic and hydrophilic peptidic chains

AUTHOR(S): Gallot, Bernard; Hassan, Hussein Haj

CORPORATE SOURCE: Cent. Biophys. Mol., Orleans, 45071, Fr.

SOURCE: ACS Symposium Series (1989), 384 (Polym. Assoc. Struct.), 116-28

CODEN: ACSMC8; ISSN: 0097-6156

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Amphiphilic **lipopeptides** with a hydrophobic paraffin chain containing 12 to 18 C atoms and a hydrophilic peptide chain exhibit lyotropic mesophases and good emulsifying properties. The x-ray diffraction study of the mesophases and of **dry lipopeptides** showed existence of three types of mesomorphic structures: lamellar, cylindrical hexagonal and body-centered cubic. Two types of polymorphism were also

identified: one as a function of the length of the peptide chain and the other as a function of the water content of the mesophases. The emulsifying properties of the **lipopeptides** in numerous pairs of immiscible liqs. such as water/hydrocarbons and water/base products of the cosmetic industry showed that small amts. of **lipopeptides** easily give three types of emulsions: simple emulsions, miniemulsions and microemulsions.

L7 ANSWER 8 OF 10 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1988:446466 HCAPLUS
DOCUMENT NUMBER: 109:46466
TITLE: Synthesis and structural study by x-ray diffraction of lyotropic block **lipopeptidic** polymers with polylysine and poly(glutamic acid) peptidic chains
AUTHOR(S): Gallot, Bernard; Douy, Andre; Hassan, Hussein Haj
CORPORATE SOURCE: Cent. Biophys. Mol., Orleans, 45071, Fr.
SOURCE: Molecular Crystals and Liquid Crystals (1987), 153(Pt. A), 347-56
CODEN: MCLCA5; ISSN: 0026-8941
DOCUMENT TYPE: Journal
LANGUAGE: English

AB **Lipopeptides** with polylysine or poly(glutamic acid) peptide chains were synthesized. Their structural study, in the **dry** state and in water solution by x-ray diffraction, shows the existence of 2 types of mesophases: lamellar and hexagonal. The influence of the nature and the degree of polym. of the peptide chains and of the water concentration on the type and the structural parameters of the mesophase was **established**.

L7 ANSWER 9 OF 10 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1986:223002 HCAPLUS
DOCUMENT NUMBER: 104:223002
TITLE: One-step column chromatographic **procedure** for purification of mycobacterial glycopeptidolipid antigens
AUTHOR(S): Dimitrijevic, S. D.; Johnson, Marsha M.; Barrow, William W.
CORPORATE SOURCE: Dep. Microbiol. Immunol., Texas Coll. Osteopath. Med., Fort Worth, TX, 76107, USA
SOURCE: Journal of Chromatography (1986), 377, 345-9
CODEN: JOCRAM; ISSN: 0021-9673
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Glycopeptidolipid (GPL) antigens were extracted from serovar 20 of the Mycobacterium avium-M. intracellulare-M. scrofulaceum serocomplex, **dissolved** in chloroform, and applied to a Chromaflex column packed with silica gel H. The column was developed with chloroform until all of the pigments were eluted. The eluting solvent was then changed to chloroform-methanol (90:10) and 3 mL fractions were **collected** on an LKB Ultrarac fraction **collector**. Individual fractions were dried, reconstituted in chloroform, and monitored by TLC. The GPL antigens routinely came off in fractions 57-96, and yields of pure GPL antigens amounted to 10.4% of total lipid. Thus, the short-column chromatog. **procedure** can be used to purify sufficient amts. of the GPL antigens in 1/10 the time that it would take using current **procedures**.

L7 ANSWER 10 OF 10 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1958:20843 HCAPLUS

DOCUMENT NUMBER: 52:20843
ORIGINAL REFERENCE NO.: 52:3687c-h
TITLE: Synthesis of phosphatidyl peptides. I.
O-(Distearoyl-L- α -glycerylphosphoryl)-L-serylglcylglycine
AUTHOR(S): Baer, Erich; Maurukas, Jonas; Clarke, Donald D.
CORPORATE SOURCE: Univ. Toronto, Can.
SOURCE: Journal of Biological Chemistry (1957), 228, 181-91
CODEN: JBCHA3; ISSN: 0021-9258
DOCUMENT TYPE: Journal
LANGUAGE: Unavailable

AB cf. C.A. 50, 811f; 51, 3452b. A phosphatidyl tripeptide, O-(distearoyl-L- α -glycerylphosphoryl)-L-serylglcylglycine (I), was prepared in 12% over-all yield by phosphorylation of D- α - β -distearin (II) with PhOP(O)Cl₂ (III) and pyridine to give distearoyl-L- α -glycerylphenylphosphoryl chloride (IV), or esterification of IV with N-carbobenzyloxy-L-serylglcylglycine benzyl ester (V) in the presence of lutidine, or removal of the protective groups by catalytic hydrogenolysis. The synthesis of V was simplified by condensing N-carbobenzyloxy-L-serine (VI) with glycylglycine benzyl ester (VII) by means of N,N'-dicyclohexylcarbodiimide (VIII). I is cleaved by CH₂N₂ with the formation of di-Me distearoyl-L- α -glycerophosphate (IX). This reaction suggests that CH₂N₂ may be useful in elucidating the structure of natural **lipopeptides** and lipoproteins. VII.HCl (3.6 g.) and 3 cc. Et₃N in 30 cc. CHCl₃ treated with 3.3 g. VI in 30 cc. MeCN and 3.0 g. VIII in 9 cc. CHCl₃, the mixture held overnight at room temperature, diluted with 75 cc. CH₂Cl₂, filtered, the solid suspended in 75 cc. (MeOCH₂)₂, centrifuged, the **precipitate** reextd., and the combined exts. diluted with 300 cc. petr. ether yielded 3.6 g. V, m. 150-2°. III (1.68 g.), 1.24 g. quinoline, and 25 cc. CHCl₃ treated dropwise at 25° during 2.5 hrs. with 5.0 g. II (cf. C.A. 47, 3234e), the product after 1 hr. treated rapidly at 45° with 3.55 g. V in 45 cc. lutidine, the solution concentrated in vacuo below 50°, the residue extracted with 50 cc. petr. ether (b. 30-60°), the mixture separated by centrifugation, the extraction repeated 4 times, the combined exts. concentrated to **dryness** in vacuo, the residue washed in 75 cc. CHCl₃ with 20-cc. portions of 1.5N H₂SO₄ then with H₂O, the dried CHCl₃ solution concentrated in vacuo, the residue (7 g.) in 100 cc. hot Me₂CO allowed to cool to 25°, the **precipitate** centrifuged, washed with Me₂CO, the mother liquor and washings concentrated in vacuo, the residue **dissolved** in 50 cc. hot petr. ether, the solution held overnight at room temperature, centrifuged, and the supernatant liquid chromatographed yielded 1.2 g. of mostly bis(distearoyl-L- α -glyceryl) phenyl phosphate and 1.8 g. distearoyl-L- α -glycerylphenylphosphoryl-N-carbobenzyloxy-L-serylglcylglycine (X). X (1.8 g.) in 50 cc. lukewarm AcOH containing 0.5 g. Pt oxide and 0.5 g. Pd black hydrogenated under 50 cm. H₂O pressure, the mixture warmed to 65°, centrifuged, the supernatant solns. held 1 hr. at 6°, filtered, and the solid triturated with CHCl₃ yielded 0.77 g. I, m. 181-2° (decomposition), [α]_D 7.6 0.2° (c 5, CHCl₃). Hydrogenolysis of V yielded 80% L-serylglcylglycine, [α]_{25D} 31.8° (c 5.6, N HCl), [α]_{27D} 34.0° (water). IX m. 50-1°.

=> d que stat 19

L1 1 SEA FILE=REGISTRY ABB=ON DAPTOMYCIN/CN
L2 2349 SEA FILE=HCAPLUS ABB=ON ?LIPOPEPTID? OR L1 OR ?DAPTOMYCIN? OR
A54145 OR A(W)54145
L3 100 SEA FILE=HCAPLUS ABB=ON L2 AND (?DISSOLV? OR ?CRYSTAL? OR
?PRECIP?)
L4 10 SEA FILE=HCAPLUS ABB=ON L3 AND (?COLLECT? OR DRY? OR ?STOR?)
L5 6 SEA FILE=HCAPLUS ABB=ON L4 AND (?STABIL? OR ?STABL? OR
?AMORPH? OR ?MANUF? OR ?PROCES? OR ?PROCEED?)
L6 2 SEA FILE=HCAPLUS ABB=ON L4 AND (?METHOD? OR ?TECHNIQ?)
L7 10 SEA FILE=HCAPLUS ABB=ON L4 OR L5 OR L6
L8 12 SEA L7
L9 9 DUP REMOV L8 (3 DUPLICATES REMOVED)

=> d ibib abs 19 1-9

L9 ANSWER 1 OF 9 WPIDS COPYRIGHT 2004 THE THOMSON CORP on STN
ACCESSION NUMBER: 2003-598353 [56] WPIDS
DOC. NO. CPI: C2003-162413
TITLE: New **amorphous** and **crystalline**
polymorphs of sodium 4-((4-chloro-2-
hydroxybenzoyl)amino)butanoate useful for delivery of
active agents e.g. insulin.
DERWENT CLASS: B04 B05 B07 D16
INVENTOR(S): BHANDARKAR, S; LEUCHYK, H; MAJURU, S
PATENT ASSIGNEE(S): (EMIS-N) EMISPHERE TECHNOLOGIES INC
COUNTRY COUNT: 102
PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
WO 2003057650	A2	20030717	(200356)*	EN	41
RW: AT BE BG CH CY CZ DE DK EA EE ES FI FR GB GH GM GR HU IE IT KE LS LU MC MW MZ NL OA PT SD SE SI SK SL SZ TR TZ UG ZM ZW					
W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ OM PH PL PT RO RU SC SD SE SG SK SL TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW					
AU 2003223158	A1	20030724	(200421)		

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 2003057650	A2	WO 2003-US878	20030109
AU 2003223158	A1	AU 2003-223158	20030109

FILING DETAILS:

PATENT NO	KIND	PATENT NO
AU 2003223158	A1 Based on	WO 2003057650

PRIORITY APPLN. INFO: US 2002-347610P 20020109

AN 2003-598353 [56] WPIDS

AB WO2003057650 A UPAB: 20030903

NOVELTY - **Crystalline** polymorphs of anhydrous, hemihydrate,
isopropanol solvate or pentahydrate sodium 4-((4-chloro-2-

hydroxybenzoyl)amino)butanoate (sodium 4-CNAB) exhibiting X-ray powder diffraction patterns as given in the specification, and **amorphous** sodium 4-CNAB are new.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are included for the following:

(1) a composition comprising **crystalline** polymorph of anhydrous, hemihydrate, isopropanol solvate or pentahydrate form of sodium 4-CNAB, or **amorphous** sodium 4-CNAB and a biological agent;

(2) a dosage unit form comprising the composition and an excipient, diluent, disintegrant, lubricant, plasticizer, colorant, and/or a dosing vehicle; and

(3) **methods** of preparing forms (I) - (IV) of sodium 4-CNAB and **amorphous** sodium 4-CNAB.

USE - The compounds are used for administering active agents.

ADVANTAGE - The anhydrous/hemihydrate/isopropanol solvate/pentahydrate polymorphs of sodium 4-CNAB have melting point onsets as determined by differential scanning calorimetry at 215.07 or 222.02/214.24/223.08/213.05 deg. C respectively. The polymorphs improve the bioavailability of active agent compare to administration of the active agent without the delivery agent.

Dwg.0/28

L9 ANSWER 2 OF 9 WPIDS COPYRIGHT 2004 THE THOMSON CORP on STN
 ACCESSION NUMBER: 2003-596426 [56] WPIDS
 CROSS REFERENCE: 2002-583668 [62]; 2002-599761 [64]; 2003-167264 [16]
 DOC. NO. CPI: C2003-161476
 TITLE: Preparation of **daptomycin** useful for treating bacterial infections comprises **crystallizing amorphous daptomycin** from solution comprising cation from salt, buffer, organic **precipitant** and low molecular weight alcohol.
 DERWENT CLASS: A96 B05
 INVENTOR(S): GOVARDHAN, C; KEITH, D; KHALAF, N
 PATENT ASSIGNEE(S): (GOVA-I) GOVARDHAN C; (KEIT-I) KEITH D; (KHAL-I) KHALAF N
 COUNTRY COUNT: 1
 PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
US 2003045484	A1	20030306	(200356)*		21

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
US 2003045484	A1	Provisional	US 2000-256268P
		Provisional	US 2001-274741P
		Provisional	US 2001-340525P
		Provisional	US 2001-341315P
			US 2001-24701
			20011218
			20010309
			20011213
			20011213
			20011217

PRIORITY APPLN. INFO: US 2001-24701 20011217; US
 2000-256268P 20001218; US
 2001-274741P 20010309; US
 2001-340525P 20011213; US
 2001-341315P 20011213

AN 2003-596426 [56] WPIDS
 CR 2002-583668 [62]; 2002-599761 [64]; 2003-167264 [16]
 AB US2003045484 A UPAB: 20040418

NOVELTY - Preparation of **daptomycin** comprises **crystallizing amorphous daptomycin** from a solution (S1) comprising a cation from a salt, buffer, organic **precipitant** and a low molecular weight alcohol.

DETAILED DESCRIPTION - An INDEPENDENT CLAIM is included for preparing (P1) a **crystalline** or **crystal-like daptomycin** which comprises **crystallizing** or **precipitating daptomycin** from a solution (S2) comprising **daptomycin**, a salt containing monovalent or divalent cation, a pH buffering agent and a low molecular weight or polyhydric alcohol.

ACTIVITY - Antibacterial.

No biological tests or results are given.

MECHANISM OF ACTION - None given.

USE - Used for the preparation of **daptomycin** in the form of urchin-like, cluster of needle, or rod-like **crystals** (claimed) useful in formulating pharmaceutical compositions for treating bacterial infections, and for preparation of bulk sterile products.

ADVANTAGE - The **daptomycin** has a starting purity of at least 90 (preferably at least 93)% or a purity before **crystallization** or **precipitation** of upto 90% and after **crystallization** or **precipitation** of at least 95-98%. The **method** is simple and robust for large-scale and/or commercial production of **daptomycin**.

Dwg.0/9

L9	ANSWER 3 OF 9	MEDLINE on STN	DUPLICATE 1
ACCESSION NUMBER:	2003186452	MEDLINE	
DOCUMENT NUMBER:	PubMed ID: 12705595		
TITLE:	Detection of cyclic lipopeptide biomarkers from <i>Bacillus</i> species using atmospheric pressure matrix-assisted laser desorption/ionization mass spectrometry.		
AUTHOR:	Madonna Angelo J; Voorhees Kent J; Taranenko Nelli I; Laiko Victor V; Doroshenko Vladimir M		
CORPORATE SOURCE:	Department of Chemistry, Colorado School of Mines, Golden, Colorado 80401, USA.		
CONTRACT NUMBER:	2R44RR153-31-02 (NCRR)		
SOURCE:	Analytical chemistry, (2003 Apr 1) 75 (7) 1628-37. Journal code: 0370536. ISSN: 0003-2700.		
PUB. COUNTRY:	United States		
DOCUMENT TYPE:	Journal; Article; (JOURNAL ARTICLE)		
LANGUAGE:	English		
FILE SEGMENT:	Priority Journals		
ENTRY MONTH:	200308		
ENTRY DATE:	Entered STN: 20030423 Last Updated on STN: 20030808 Entered Medline: 20030807		

AB A novel approach to microbial detection using atmospheric pressure matrix-assisted laser desorption/ionization with an ion trap mass spectrometer to analyze whole cell bacteria is introduced. This new approach was tested with lyophilized spores and cultures of *Bacillus globigii* (BG) grown on agar media for 4 days or longer. At each stage of growth, it was found that biomarkers, identified as cyclic **lipopeptides** known as fengycin and surfactin, could be detected by pulsed ultraviolet laser irradiation of intact BG cells (approximately 5 mg) **cocrystallized** with alpha-cyano-4-hydroxycinnamic acid. Furthermore, definitive amino acid sequence information was obtained by performing tandem mass spectrometry on the precursor ions of the cyclic **lipopeptides**. The investigation was broadened to include the examination of aerosolized BG spores **collected** from the atmosphere and directly deposited onto double-sided tape. Subsequent

analysis of the recovered spores resulted in the production of mass peaks consistent with fengycin. Other *Bacillus* species were analyzed for comparison and showed mass spectral peaks also identified as originating from various cyclic **lipopeptides**. Further studies were conducted using a pulsed infrared laser as the excitation source to analyze BG cells (approximately 5 mg) suspended in a matrix of 0.03 M ammonium citrate and glycerol resulting in the production of ions characteristic of fengycin and surfactin.

L9 ANSWER 4 OF 9 WPIDS COPYRIGHT 2004 THE THOMSON CORP on STN

ACCESSION NUMBER: 2003-167264 [16] WPIDS

CROSS REFERENCE: 2002-583668 [62]

DOC. NO. CPI: C2003-043400

TITLE: New **crystalline** form of **daptomycin**
useful for treating e.g. complicated skin and soft tissue
infections, endocarditis and bacteremia.

DERWENT CLASS: A96 B02 D21

INVENTOR(S): GOVARDHAN, C; KHALAH, N; KHALAF, N

PATENT ASSIGNEE(S): (ALTU-N) ALTUS BIOLOGICS INC; (ALTU-N) ALTUS PHARM INC;
(CUBI-N) CUBIST PHARM INC; (GOVA-I) GOVARDHAN C; (KHAL-I)
KHALAF N

COUNTRY COUNT: 100

PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
WO 2002096936	A2	20021205	(200316)	*	EN
RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TR TZ UG ZM ZW					
W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ OM PH PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW					
US 2002111311	A1	20020815	(200316)		14
EP 1383794	A2	20040128	(200409)		EN
R: AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT RO SE SI TR					
AU 2002253813	A1	20021209	(200452)		

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 2002096936	A2	WO 2001-US49167	20011218
US 2002111311	A1 Provisional	US 2000-256268P	20001218
	Provisional	US 2001-274741P	20010309
		US 2001-24405	20011218
EP 1383794	A2	EP 2001-270136	20011218
		WO 2001-US49167	20011218
AU 2002253813	A1	AU 2002-253813	20011218

FILING DETAILS:

PATENT NO	KIND	PATENT NO
EP 1383794	A2 Based on	WO 2002096936
AU 2002253813	A1 Based on	WO 2002096936

PRIORITY APPLN. INFO: US 2001-274741P 20010309; US
2000-256268P 20001218; US

2001-24405 20011218
 AN 2003-167264 [16] WPIDS
 CR 2002-583668 [62]
 AB WO 200296936 A UPAB: 20040920

NOVELTY - **Crystalline** form of **daptomycin** is new.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for:

- (1) a **lipopeptide** in **crystalline** form selected from **daptomycin** and A-21978C analogs;
- (2) a pharmaceutical composition comprising the **lipopeptide** and optionally a carrier;
- (3) a container comprising the composition and optionally a buffer
- (4) a formulation comprising the **lipopeptide**;
- (5) a **method** for the preparation of the **crystalline** form of a **lipopeptide** comprising combining the **lipopeptide** with **crystallization** solution having at least one cation and at least one alcohol selected from polyhydric alcohols and/or low molecular weight alcohols. The **lipopeptide** is selected from **daptomycin** and its analogs;
- (6) a **method** for treating a disease caused by a gram-positive pathogen comprising administering the composition;
- (7) a **method** of administering the **crystalline lipopeptide** or its salt in a composition with a carrier to a subject;
- (8) a **method** of **storing** a **lipopeptide** selected from **daptomycin** and A-21978C analog comprising preparing the **lipopeptide** in **crystalline** form and **storing** the **crystalline lipopeptide**; and
- (9) a **method** of preparing the **lipopeptide** selected from **daptomycin** and A-21978C comprising preparing the **lipopeptide** in **crystalline** form.

ACTIVITY - Antibacterial; Antiinflammatory.

MECHANISM OF ACTION - None given.

USE - As a food composition, a feed composition, veterinary composition, a cosmetic composition or personal care composition (e.g. washing formulation, soap, shampoo, deodorant, perfume, cologne or antiperspirant), for treating a disease caused by a gram-positive pathogen e.g. complicated skin and soft tissue infections, community-acquired pneumonia, complicated urinary tract infections, enterococcal infections, endocarditis and bacteremia (all claimed).

ADVANTAGE - The **crystalline** form provides alternate modes of delivery and control of dosage.
 Dwg.0/0

L9 ANSWER 5 OF 9 WPIDS COPYRIGHT 2004 THE THOMSON CORP on STN
 ACCESSION NUMBER: 2002-682742 [73] WPIDS
 DOC. NO. CPI: C2002-192603
 TITLE: Use of an aminoglycoside for the treatment of lysosomal storage disease e.g. Hurley syndrome.
 DERWENT CLASS: B03 D16
 INVENTOR(S): BEDWELL, D M; KEELING, K M
 PATENT ASSIGNEE(S): (UABR-N) UAB RES FOUND
 COUNTRY COUNT: 89
 PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
WO 2002065989	A2	20020829	(200273)*	EN	54
RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ					
NL OA PT SD SE SL SZ TR TZ UG ZM ZW					
W: AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES FI GB GD					

GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV
 MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT
 UA UG US UZ VN YU ZA ZW
 EP 1368039 A2 20031210 (200382) EN
 R: AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT
 RO SE SI TR
 AU 2002240417 A1 20020904 (200427)
 JP 2004522763 W 20040729 (200452) 81

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 2002065989	A2	WO 2002-US4842	20020220
EP 1368039	A2	EP 2002-706325	20020220
		WO 2002-US4842	20020220
AU 2002240417	A1	AU 2002-240417	20020220
JP 2004522763	W	JP 2002-565550	20020220
		WO 2002-US4842	20020220

FILING DETAILS:

PATENT NO	KIND	PATENT NO
EP 1368039	A2 Based on	WO 2002065989
AU 2002240417	A1 Based on	WO 2002065989
JP 2004522763	W Based on	WO 2002065989

PRIORITY APPLN. INFO: US 2001-270092P 20010220

AN 2002-682742 [73] WPIDS

AB WO 200265989 A UPAB: 20021113

NOVELTY - Treatment of lysosomal **storage** disease involves administration of an aminoglycoside.

ACTIVITY - Cardiant, Hepatotropic, Auditory, Nootropic.

To determine if aminoglycoside-mediated suppression of stop mutations can **restore** a level of alpha -L-iduronidase activity that is sufficient to reduce glycosaminoglycan accumulation, normal and Hurler Q70X/W402X fibroblasts were cultured with 35S04 for 3 days to label the sulfated glycosaminoglycans synthesized during this period. The cells were then cultured in medium lacking 35S04 for 2 days in the presence or absence of gentamycin. After this chase period, the glycosaminoglycans were **precipitated** and total 35S incorporated was quantified. Untreated Hurler fibroblasts accumulated almost 4-fold more 35S- labelled glycosaminoglycans than normal fibroblasts. The counts in the gentamycin-treated Hurler fibroblasts were reduced to a level similar to that observed in normal fibroblasts. The results indicate that the low level of alpha -L-iduronidase activity **restored** by gentamycin treatment can dramatically reduce the steady-state glycosaminoglycan level in Hurler fibroblasts.

The effect of poly-L-aspartate on the aminoglycoside-mediated suppression of stop codons was studied. The co-administration of poly-L-aspartate with gentamycin did not affect the level of readthrough at low gentamycin concentrations, but poly-L-aspartate increased the alpha -L-iduronidase activity by 60-70% in Hurler fibroblasts at high gentamycin concentrations.

MECHANISM OF ACTION - Gene Therapy.

USE - For the treatment of lysosomal **storage** disease e.g. mucopolysaccharidosis I (e.g. Scheie disease, Hurler syndrome) and Batten disease (claimed).

ADVANTAGE - The aminoglycoside suppresses a naturally occurring

premature stop mutation, such as IDUA-Q70X stop mutation and IDUA-W402X stop mutation without inducing the toxic side effects associated with aminoglycosides.

Dwg.0/7

L9 ANSWER 6 OF 9 WPIDS COPYRIGHT 2004 THE THOMSON CORP on STN
 ACCESSION NUMBER: 2002-599761 [64] WPIDS
 CROSS REFERENCE: 2002-583668 [62]
 DOC. NO. CPI: C2002-169581
 TITLE: **Crystalline or crystal-like lipopeptide** useful for treating bacterial infections includes **daptomycin, A54145** or a **daptomycin-related lipopeptide**.
 DERWENT CLASS: B04 C07 D13 D21 D22 D25 J04
 INVENTOR(S): KEITH, D; LAI, J; GOVARDHAN, C; KHALAF, N
 PATENT ASSIGNEE(S): (CUBI-N) CUBIST PHARM INC; (GOVA-I) GOVARDHAN C; (KEIT-I) KEITH D; (KHAL-I) KHALAF N; (LAIJ-I) LAI J
 COUNTRY COUNT: 101
 PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
WO 2002059145	A1	20020801	(200264)*	EN	69
RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TR TZ UG ZM ZW					
W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ OM PH PL PT RO RU SD SE SG SI SK SL TJ TM TN TR TT TZ UA UG US UZ VN YU ZA ZW					
US 2003045678	A1	20030306	(200320)		
EP 1343811	A1	20030917	(200362)	EN	
R: AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT RO SE SI TR					
AU 2002246687	A1	20020806	(200427)		
JP 2004525108	W	20040819	(200455)		106

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 2002059145	A1	WO 2001-US48886	20011217
US 2003045678	A1 Provisional Provisional Provisional Provisional	US 2000-256268P	20001218
		US 2001-274741P	20010309
		US 2001-340525P	20011213
		US 2001-341315P	20011213
		US 2001-23517	20011217
EP 1343811	A1	EP 2001-994272	20011217
		WO 2001-US48886	20011217
AU 2002246687	A1	AU 2002-246687	20011217
JP 2004525108	W	WO 2001-US48886	20011217
		JP 2002-559447	20011217

FILING DETAILS:

PATENT NO	KIND	PATENT NO
EP 1343811	A1 Based on	WO 2002059145
AU 2002246687	A1 Based on	WO 2002059145
JP 2004525108	W Based on	WO 2002059145

PRIORITY APPLN. INFO: US 2001-341315P 20011213; US
 2000-256268P 20001218; US
 2001-274741P 20010309; US
 2001-340525P 20011213; US
 2001-23517 20011217

AN 2002-599761 [64] WPIDS

CR 2002-583668 [62]

AB WO 200259145 A UPAB: 20040826

NOVELTY - A **crystalline** or **crystal-like**
lipopeptide (A) or its salt includes **daptomycin**,
A54145 or a **daptomycin-related lipopeptide**
 (preferably **daptomycin**).

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for:

(1) a container comprising the composition containing (A) and a carrier;

(2) **storing** (A) involving providing a **dissolved** solution of a **lipopeptide**, **crystallizing** or **precipitating** the **lipopeptide**, **collecting** and **drying** the **lipopeptide** and **storing** the **lipopeptide**, where (A) is more **stable** than its **amorphous** form; and

(3) **manufacturing** (A) involving providing an **amorphous** form of a **lipopeptide**, **crystallizing** or **precipitating** the **lipopeptide** and **collecting** the **crystalline** or **crystal-like lipopeptide**.

ACTIVITY - Antibacterial; Antiarthritic; Antiinflammatory; Gynecological.

MECHANISM OF ACTION - None given.

USE - In a pharmaceutical, food, feed, veterinary (e.g. soap, shampoo or pharmaceutical composition), cosmetic or personal care formulation (e.g. washing formulation, soap, shampoo or antiperspirant) (claimed) for treating bacterial infections e.g. gram positive bacterial infection of any organ or tissue in the body; for treating endocarditis, intra-abdominal infections, pneumonia, bone and joint infections and obstetrical/gynecological infection, nephritis, septic arthritis and osteomyelitis.

ADVANTAGE - The **crystalline** **daptomycin** has higher purity than the **amorphous** form. The **amorphous** form has purity of 90 or 93 % and (A) has purity of at least 95 (preferably 98) % and contains no single impurity greater than 1 % measured by HPLC. (A) Exhibits a higher **stability** (measured by antibiotic activity or degradation of **lipopeptide** antibiotic) to heat, light, degradation or humidity than its **amorphous** form and exhibits lower conversion to anhydro-**daptomycin** or beta -isomer of **daptomycin** than the **amorphous** form of **daptomycin**. The carrier enhances the oral availability of **daptomycin**. An X-ray diffraction pattern of the **crystalline** **daptomycin**, using a Cu (λ = 1.54 deg. A) X-ray source, has a diffraction angle (2 theta) = 10.9, 19.2 and 23.3 (deg.) or a diffraction angle (2 theta) = 19.2, 23.2, 23.4 and 23.6 (deg.). The **crystal-like** **daptomycin** has **crystalline** characteristics by birefringence but does not have **crystalline** characteristics by X-ray powder diffraction.
 Dwg.0/16

L9 ANSWER 7 OF 9 WPIDS COPYRIGHT 2004 THE THOMSON CORP on STN
 ACCESSION NUMBER: 2002-583668 [62] WPIDS
 CROSS REFERENCE: 2002-599761 [64]; 2003-167264 [16]
 DOC. NO. CPI: C2002-165080

TITLE: Purification of **daptomycin** useful in preparation of sterile products involves **crystallizing amorphous** **daptomycin** using solution comprising a cation from salt, buffer, **precipitant** and low molecular weight alcohol.

DERWENT CLASS: B02

INVENTOR(S): GOVARDHAN, C; KEITH, D; KHALAF, N

PATENT ASSIGNEE(S): (ALTU-N) ALTUS BIOLOGICS INC; (CUBI-N) CUBIST PHARM INC; (GOVA-I) GOVARDHAN C; (KEIT-I) KEITH D; (KHAL-I) KHALAF N

COUNTRY COUNT: 99

PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
WO 2002056829	A2	20020725	(200262)*	EN	41
RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TR TZ UG ZM ZW					
W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PH PL PT RO RU SD SE SG SI SK SL TJ TM TN TR TT TZ UA UG US UZ VN YU ZA ZM ZW					
US 2003045484	A1	20030306	(200356)		21
KR 2003081353	A	20031017	(200413)		
AU 2002246688	A1	20020730	(200427)		

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 2002056829	A2	WO 2001-US48887	20011217
US 2003045484	A1	Provisional	US 2000-256268P
		Provisional	US 2001-274741P
		Provisional	US 2001-340525P
		Provisional	US 2001-341315P
			US 2001-24701
KR 2003081353	A	KR 2003-708117	20030618
AU 2002246688	A1	AU 2002-246688	20011217

FILING DETAILS:

PATENT NO	KIND	PATENT NO
AU 2002246688	A1 Based on	WO 2002056829

PRIORITY APPLN. INFO: US 2001-341315P 20011213; US
2000-256268P 20001218; US
2001-274741P 20010309; US
2001-340525P 20011213; US
2001-24701 20011217

AN 2002-583668 [62] WPIDS
CR 2002-599761 [64]; 2003-167264 [16]
AB WO 200256829 A UPAB: 20040426

NOVELTY - Purification of **daptomycin** involves **crystallizing amorphous** **daptomycin** using solution comprising a cation from salt, buffer, organic **precipitant** and low molecular weight alcohol.

USE - In the purification of **daptomycin** (claimed), which is used in the preparation of pharmaceutical composition for treating bacterial infections (preferably gram-positive bacteria) and sterile

product, particularly bulk sterile product.

ADVANTAGE - The **daptomycin** has a purity before **crystallizing** or **precipitating** of less than 90 (preferably 40, especially 10)% and has purity after **crystallizing** or **precipitating** of least 95 (preferably 96, especially 98)%. The **process** is simple and can be used for large-scale commercial production.

Dwg.0/9

L9 ANSWER 8 OF 9 EMBASE COPYRIGHT 2004 ELSEVIER INC. ALL RIGHTS RESERVED.
on STN

ACCESSION NUMBER: 2001091824 EMBASE
TITLE: New **lipopeptides** from the Caribbean cyanobacterium *Lyngbya majuscula*.
AUTHOR: Jimenez J.I.; Scheuer P.J.
CORPORATE SOURCE: P.J. Scheuer, Chemistry Department, University of Hawaii, Honolulu, HI 96822-2275, United States.
scheuer@gold.chem.hawaii.edu
SOURCE: Journal of Natural Products, (2001) 64/2 (200-203).
Refs: 24
ISSN: 0163-3864 CODEN: JNPRDF
COUNTRY: United States
DOCUMENT TYPE: Journal; Article
FILE SEGMENT: 004 Microbiology
LANGUAGE: English
SUMMARY LANGUAGE: English

AB Four new metabolites have been isolated from a marine red cyanobacterium, *Lyngbya majuscula*, **collected** at Boca del Drago Beach, Bocas del Toro, Panama. The planar structures were elucidated by 1D and 2D NMR **techniques**. These compounds were assigned the trivial names pseudodysidenin (2), dysidenamide (3), nordysidenin (4), and dragonamide (7).

L9 ANSWER 9 OF 9 MEDLINE on STN DUPLICATE 2
ACCESSION NUMBER: 87069748 MEDLINE
DOCUMENT NUMBER: PubMed ID: 3538372
TITLE: Chemical composition of antigen 60 from *Mycobacterium bovis* BCG.
AUTHOR: Fabre I; L'Homme O; Bruneteau M; Michel G; Cocito C
SOURCE: Scandinavian journal of immunology, (1986 Nov) 24 (5) 591-602.
Journal code: 0323767. ISSN: 0300-9475.
PUB. COUNTRY: ENGLAND: United Kingdom
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 198612
ENTRY DATE: Entered STN: 19900302
Last Updated on STN: 19900302
Entered Medline: 19861224

AB Antigen 60 (A60), the main **thermostable** immunogen of tuberculin and PPD, has been purified from *Mycobacterium bovis* BCG cytoplasm, and identified by crossed immunoelectrophoresis with anti-BCG polyclonal antiserum. Two A60 fractions, free lipids and lipid-conjugated compounds, have been recognized. The free lipids represented about 30% (**dry** weight), and consisted essentially of C16-C18 fatty acids, and of phosphatidyl-inositol-mannosides. Lipoconjugates, upon DEAE-cellulose chromatography and gel filtration, yielded two main fractions of neutral and polar components. Chromatography of delipidated and deproteinized A60 on Sephadex G-100 yielded: a high molecular weight fraction (A1, 18%, a

lipoglucan of congruent to 10(6)), and a low molecular weight fraction (B, 10%, a **lipopeptidoglycan** of congruent to 10(4)) containing mannose, glucose, and small amounts of arabinose. The polysaccharide moieties of fractions A1 and B were submitted to acetylation, methylation, and acid hydrolysis, and the structure of the hydrolysed polymer was deduced by combined gas chromatography/mass spectrometry analysis. The results indicated a branched structure involving 1,4-, 1,6-, and 1,4,6-linked D-glucosyl or D-mannosyl residues. Glucan- and peptidoglycan-bound fatty acids were identified as saturated (C16-C18) and monounsaturated linear acids (C12-C18). Immunodiffusion on agarose gel indicated that delipidation and proteolysis did not suppress the ability of A60 to yield **immunoprecipitates** with anti-A60 antiserum. The high polymer fractions obtained by chromatography on DEAE cellulose and Sephadex G-100 were also reactive. It is concluded that A60 is made of free lipids and of **lipopeptidoglycans** of high molecular weights (10(6)-10(7)) endowed with immunogenic properties.

=> d que stat l14

L1 1 SEA FILE=REGISTRY ABB=ON DAPTOMYCIN/CN
L2 2349 SEA FILE=HCAPLUS ABB=ON ?LIPOPEPTID? OR L1 OR ?DAPTOMYCIN? OR
A54145 OR A(W)54145
L3 100 SEA FILE=HCAPLUS ABB=ON L2 AND (?DISSOLV? OR ?CRYSTAL? OR
?PRECIP?)
L4 10 SEA FILE=HCAPLUS ABB=ON L3 AND (?COLLECT? OR DRY? OR ?STOR?)
L5 6 SEA FILE=HCAPLUS ABB=ON L4 AND (?STABIL? OR ?STABL? OR
?AMORPH? OR ?MANUF? OR ?PROCES? OR ?PROCED?)
L6 2 SEA FILE=HCAPLUS ABB=ON L4 AND (?METHOD? OR ?TECHNIQ?)
L7 10 SEA FILE=HCAPLUS ABB=ON L4 OR L5 OR L6
L12 3 SEA FILE=HCAPLUS ABB=ON L7 AND ?ALCOHOL?
L13 1 SEA FILE=HCAPLUS ABB=ON L7 AND ?POLYHYDRIC?
L14 10 SEA FILE=HCAPLUS ABB=ON L7 OR L12 OR L13

=> d ibib abs l14 1-10

L14 ANSWER 1 OF 10 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2004:351618 HCAPLUS

DOCUMENT NUMBER: 140:362560

TITLE: Heat-generating compositions containing zeolites,
cosmetics containing them, skin care **method**,
and **method** for dispersing zeolites

INVENTOR(S): Yoneda, Tadashi; Furuya, Kazuo

PATENT ASSIGNEE(S): Showa Denko K. K., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 17 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2004131413	A2	20040430	JP 2002-296883	20021010
PRIORITY APPLN. INFO.:			JP 2002-296883	20021010

OTHER SOURCE(S): MARPAT 140:362560

AB The compns. contain (A) zeolites, (B) dihydric alcs., (C) **polyhydric** alcs. having ≥ 3 OH groups, (D) alkaline earth metal hydroxides, (E) acids, and optionally (F) surfactants and (G) oily components. The cosmetics, useful for massage, cleansing, pack, etc., contain the compns., and the skin care **method** is performed using the cosmetics. Also claimed is a **method** to disperse zeolites in a substantially nonaq. medium, wherein a mixture of (D), (C), and (E) capable of **dissolving** in (C) is added to a mixture of (A) and (B) and/or (C). Zeolite 4A 20, polyethylene glycol 38, 1,3-butylene glycol 10, glycerin 24, Ca(OH)₂ 3, H₃PO₄ 3, surfactin Na 2 g were mixed to give white paste, which was **stored** at room temperature for 7 days to maintain uniform appearance.

L14 ANSWER 2 OF 10 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2003:165085 HCAPLUS

DOCUMENT NUMBER: 138:221844

TITLE: Preparation of peptide lipid compounds

INVENTOR(S): Yamada, Akihiro; Yoshinaga, Koji

PATENT ASSIGNEE(S): Japan Science and Technology Corporation, Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 6 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2003064095	A2	20030305	JP 2001-255576	20010827
PRIORITY APPLN. INFO.:			JP 2001-255576	20010827

OTHER SOURCE(S): MARPAT 138:221844

AB Peptide lipid compds. of formula $R1-C_nH_{2n}-CONH-R2-CO_2-C_mH_{2m+1}$ [$R1 = HO, CO_2H, halo, N+X-Hi(C_jH_{2j}OH)k(Me)3-i-k$ (wherein $H =$ halogen atom; $i = 0-3$; $k = 0,1$; $j = 2-4$; provided that $i+k \leq 3$); $R2$ contains a continuous sequence of 3-6 leucines and optionally 1 or 2 other amino acid on the both ends of the leucine sequence; $n = 2-12$; $m = 12-14$] having $R1$ as the hydrophilic moiety and C_mH_{2m+1} as the hydrophobic moiety are prepared. These peptide lipids are useful for biodegradable films or in adhesives for fluoro resins. Thus, 1.04 g Boc-Leu-Leu-Leu-OH and 1.06 g L-glutamic acid didodecyl ester hydrochloride were **dissolved** in **dry** THF, treated with 0.25 g **dry** Et_3N and then slowly a solution of 0.40 g di- Et cyanophosphoridate (PEPC) in 30 mL THF with stirring under ice-cooling, stirred for a while under ice-cooling and at room temperature for 4 days while covering the reaction mixture with aluminum foil to give, after workup, 85% Boc-Leu-Leu-Leu-Gln-(OC12H25)₂ (I) as a colorless solid. I (1.87 g) was **dissolved** in 10 mL $CHCl_3$, slowly treated dropwise with 13.14 g 25% $HBr/AcOH$ under ice-cooling, stirred at room temperature for 5 h to give, after workup, 70.1% H-Leu-Leu-Leu-Gln-(OC12H25)₂ (II). II (0.60 g) and 0.19 g 11-bromoundecanoic acid were **dissolved** in 20 mL THF, treated with 0.08 g **dry** Et_3N and then slowly a solution of 0.14 g di- Et cyanophosphoridate (PEPC) in 20 mL THF with stirring under ice-cooling, stirred for a while under ice-cooling and at room temperature for 4 days while blocking light from the reaction mixture with aluminum foil to give, after workup, 1.00 g $BrC_{10}H_{20}CO-Leu-Leu-Leu-Gln-(OC_{12}H_{25})_2$ (III). III (1.00 g) was **dissolved** in 60 mL THF in a flask with a ground glass stopper, followed by blowing approx. 15 mL $Me_3N(g)$ into the solution with stirring under ice-cooling, and after sealing the flask **stored** in the dark for 2 wk to give, after workup, N-[N-(11-trimethylammonioundecanoyl)tri(L-leucyl)]-L-glutamic acid didodecyl ester bromide, i.e. $Br \cdot Me_3N + C_{10}H_{20}CO-Leu-Leu-Leu-Gln-(OC_{12}H_{25})_2$ (IV), as a colorless solid. IV was **dissolved** in $CHCl_3$, casted on a silicone released paper, and air-dried, followed by peering to give a paraffin-like film with high transparency and fairly regular β -sheet structure which showed bending flexibility and neither brittle fracture nor plastic deformation but broke into pieces in a few seconds when it was added to water.

L14 ANSWER 3 OF 10 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2003:151032 HCAPLUS

DOCUMENT NUMBER: 138:283548

TITLE: Detection of cyclic **lipopeptide** biomarkers from *Bacillus* species using atmospheric pressure matrix-assisted laser desorption/ionization mass spectrometry

AUTHOR(S): Madonna, Angelo J.; Voorhees, Kent J.; Taranenko, Nelli I.; Laiko, Victor V.; Doroshenko, Vladimir M.

CORPORATE SOURCE: Department of Chemistry, Colorado School of Mines, Golden, CO, 80401, USA

SOURCE: Analytical Chemistry (2003), 75(7), 1628-1637

PUBLISHER: CODEN: ANCHAM; ISSN: 0003-2700
DOCUMENT TYPE: American Chemical Society
LANGUAGE: Journal
English

AB A novel approach to microbial detection using atmospheric pressure matrix-assisted laser desorption/ionization with an ion trap mass spectrometer to analyze whole cell bacteria is introduced. This new approach was tested with lyophilized spores and cultures of *Bacillus globigii* (BG) grown on agar media for 4 days or longer. At each stage of growth, it was found that biomarkers, identified as cyclic **lipopeptides** known as fengycin and surfactin, could be detected by pulsed UV laser irradiation of intact BG cells (.apprx.5 mg) **cocrystd** . with α -cyano-4-hydroxycinnamic acid. Furthermore, definitive amino acid sequence information was obtained by performing tandem mass spectrometry on the precursor ions of the cyclic **lipopeptides**. The investigation was broadened to include the examination of aerosolized BG spores **collected** from the atmospheric and directly deposited onto double-sided tape. Subsequent anal. of the recovered spores resulted in the production of mass peaks consistent with fengycin. Other *Bacillus* species were analyzed for comparison and showed mass spectral peaks also identified as originating from various cyclic **lipopeptides**. Further studies were conducted using a pulsed IR laser as the excitation source to analyze BG cells (.apprx.5 mg) suspended in a matrix of 0.03 M ammonium citrate and glycerol resulting in the production of ions characteristic of fengycin and surfactin.

REFERENCE COUNT: 25 THERE ARE 25 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L14 ANSWER 4 OF 10 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2001:545525 HCAPLUS
DOCUMENT NUMBER: 135:157672
TITLE: Cyclic peptide compositions for nasal administration
INVENTOR(S): Horii, Ikuo; Kobayashi, Kazuko; Shimma, Nobuo;
Yanagawa, Akira
PATENT ASSIGNEE(S): Basilea Pharmaceutica A.-G., Switz.
SOURCE: PCT Int. Appl., 117 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001052894	A2	20010726	WO 2001-EP163	20010109
WO 2001052894	A3	20020131		
W:	AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG			
EP 1251827	A2	20021030	EP 2001-909587	20010109
EP 1251827	B1	20040526		
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR			
BR 2001007764	A	20021112	BR 2001-7764	20010109

JP 2003535042	T2	20031125	JP 2001-552941	20010109
AT 267582	E	20040615	AT 2001-909587	20010109
US 2001038824	A1	20011108	US 2001-765846	20010119
ZA 2002005240	A	20030929	ZA 2002-5240	20020628
PRIORITY APPLN. INFO.:			EP 2000-101057	A 20000120
			WO 2001-EP163	W 20010109

OTHER SOURCE(S): MARPAT 135:157672

AB The present invention relates to a nasal composition of physiolo. active cyclic peptides and salts that are prepared by homogeneously dispersing an active cyclic peptide such as antifungal cyclic peptides (aerothricin, echinocandin analogs, pneumocandin analogs, and aureobasidin), antibacterial cyclic peptides (e.g., vancomycin, **daptomycin**), cyclosporin A, lanreotide, vapreotide, vasopressin antagonist and eptifibatide in a unique carrier. The powdery or **crystalline** carrier contains a water insol. polyvalent metal carrier, or organic carrier having a mean particle size of 20-500 µm, in the presence or absence of an absorption enhancer and by homogeneously adsorbing onto the carrier, and its use for therapeutic treatment of disease such as systemic fungal infections by intranasal administration. The composition can be nasally administered in a powder form. Thus, 201 mg Aerothricin 133 and 599 mg CaCO₃ (mean particle size: 40-60 µm) were mixed well. Then, 200 µL water was added, and mixing was continued until the mixture became a paste and the resulting pasty solid was freeze-dried at -50°, and further dried at 300° for 3 h in vacuo. After large particles in the **dry** powder were broken into small particles, 8 mg of calcium stearate was added and the mixture was passed through 180-µm-mesh. Aerothricin 133 was synthesized by a series of steps.

L14 ANSWER 5 OF 10 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2000:814284 HCAPLUS

DOCUMENT NUMBER: 133:366419

TITLE: Lipid particles on the basis of mixtures of liquid and solid lipids and **method** for producing same for drug delivery

INVENTOR(S): Muller, Rainer Helmut; Jennings, Volkhard; Mader, Karsten; Lippacher, Andreas

PATENT ASSIGNEE(S): Pharmasol G.m.b.H., Germany

SOURCE: PCT Int. Appl., 85 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000067728	A2	20001116	WO 2000-EP4112	20000508
WO 2000067728	A3	20010809		
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
RW:	GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG			
DE 19938371	A1	20010222	DE 1999-19938371	19990809
DE 19945203	A1	20001221	DE 1999-19945203	19990921
EP 1176949	A2	20020206	EP 2000-931138	20000508

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
IE, SI, LT, LV, FI, RO

BR 2000010354	A	20020305	BR 2000-10354	20000508
TR 200103188	T2	20020422	TR 2001-200103188	20000508
JP 2002544155	T2	20021224	JP 2000-616755	20000508
ZA 2001008794	A	20020715	ZA 2001-8794	20011025

PRIORITY APPLN. INFO.:

DE 1999-19921034	A	19990507
DE 1999-19938371	A	19990809
DE 1999-19945203	A	19990921
DE 2000-10016357	A	20000331
WO 2000-EP4112	W	20000508

AB The invention relates to lipid particles which do or do not carry active agents and comprise a mixed matrix consisting of solid and liquid lipid (so-called solid/liquid particles). The inventive particles are provided with a disordered structure (**semicryst.**, mostly non-**crystalline** to **amorphous**) in the semisolid to solid condition. The invention also relates to a **method** for producing said dispersions and especially a **method** for producing highly concentrated lipid particle dispersions with a lipid content of 30 % to 95 % or a solids content of 30 % to 95 % (lipid and **stabilizer**). Said dispersions are integral particles unlike the biamphiphilic creams and/or the highly concentrated particle dispersions result in free-flowing particle dispersions when diluted with the outer phase.

L14 ANSWER 6 OF 10 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1993:603910 HCAPLUS

DOCUMENT NUMBER: 119:203910

TITLE: Synthesis and mesomorphic behavior of comb-like polymers based on **lipopeptides** with two hydrophobic chains

AUTHOR(S): Gallot, Bernard; Diao, Tiejun

CORPORATE SOURCE: Lab. Mater. Org., CNRS, Vernaison, 69390, Fr.

SOURCE: Liquid Crystals (1993), 14(4), 947-58

CODEN: LICRE6; ISSN: 0267-8292

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Polymerizable **lipopeptides** with 2 hydrophobic chains were synthesized and transformed into comb-like polymers by radical polymerization. The structure of **dry** polymerizable **lipopeptides** and comb-like polymers and their aqueous solns. was determined by x-ray diffraction.

Comb-like polymers exhibit both thermotropic and lyotropic properties. Three types of mesomorphic structure were resolved: smectic B, smectic A, and cylindrical hexagonal. The domains of **stability** of the mesophases and the values of their structural parameters were **established**.

L14 ANSWER 7 OF 10 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1989:218763 HCAPLUS

DOCUMENT NUMBER: 110:218763

TITLE: Liquid **crystalline** phases and emulsifying properties of block copolymer hydrophobic aliphatic and hydrophilic peptidic chains

AUTHOR(S): Gallot, Bernard; Hassan, Hussein Haj

CORPORATE SOURCE: Cent. Biophys. Mol., Orleans, 45071, Fr.

SOURCE: ACS Symposium Series (1989), 384(Polym. Assoc. Struct.), 116-28

CODEN: ACSMC8; ISSN: 0097-6156

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Amphiphilic **lipopeptides** with a hydrophobic paraffin chain containing 12 to 18 C atoms and a hydrophilic peptide chain exhibit lyotropic mesophases and good emulsifying properties. The x-ray diffraction study of the mesophases and of **dry lipopeptides** showed existence of three types of mesomorphic structures: lamellar, cylindrical hexagonal and body-centered cubic. Two types of polymorphism were also identified: one as a function of the length of the peptide chain and the other as a function of the water content of the mesophases. The emulsifying properties of the **lipopeptides** in numerous pairs of immiscible liqs. such as water/hydrocarbons and water/base products of the cosmetic industry showed that small amts. of **lipopeptides** easily give three types of emulsions: simple emulsions, miniemulsions and microemulsions.

L14 ANSWER 8 OF 10 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1988:446466 HCAPLUS

DOCUMENT NUMBER: 109:46466

TITLE: Synthesis and structural study by x-ray diffraction of lyotropic block **lipopeptidic** polymers with polylysine and poly(glutamic acid) peptidic chains

AUTHOR(S): Gallot, Bernard; Douy, Andre; Hassan, Hussein Haj

CORPORATE SOURCE: Cent. Biophys. Mol., Orleans, 45071, Fr.

SOURCE: Molecular Crystals and Liquid Crystals (1987), 153(Pt. A), 347-56

CODEN: MCLCA5; ISSN: 0026-8941

DOCUMENT TYPE: Journal

LANGUAGE: English

AB **Lipopeptides** with polylysine or poly(glutamic acid) peptide chains were synthesized. Their structural study, in the **dry** state and in water solution by x-ray diffraction, shows the existence of 2 types of mesophases: lamellar and hexagonal. The influence of the nature and the degree of polym. of the peptide chains and of the water concentration on the type and the structural parameters of the mesophase was **established**.

L14 ANSWER 9 OF 10 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1986:223002 HCAPLUS

DOCUMENT NUMBER: 104:223002

TITLE: One-step column chromatographic **procedure** for purification of mycobacterial glycopeptidolipid antigens

AUTHOR(S): Dimitrijevic, S. D.; Johnson, Marsha M.; Barrow, William W.

CORPORATE SOURCE: Dep. Microbiol. Immunol., Texas Coll. Osteopath. Med., Fort Worth, TX, 76107, USA

SOURCE: Journal of Chromatography (1986), 377, 345-9

CODEN: JOCRAM; ISSN: 0021-9673

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Glycopeptidolipid (GPL) antigens were extracted from serovar 20 of the Mycobacterium avium-M. intracellulare-M. scrofulaceum serocomplex, **dissolved** in chloroform, and applied to a Chromaflex column packed with silica gel H. The column was developed with chloroform until all of the pigments were eluted. The eluting solvent was then changed to chloroform-methanol (90:10) and 3 mL fractions were **collected** on an LKB Ultrarac fraction **collector**. Individual fractions were dried, reconstituted in chloroform, and monitored by TLC. The GPL antigens routinely came off in fractions 57-96, and yields of pure GPL antigens amounted to 10.4% of total lipid. Thus, the short-column

chromatog. **procedure** can be used to purify sufficient amts. of the GPL antigens in 1/10 the time that it would take using current **procedures**.

L14 ANSWER 10 OF 10 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1958:20843 HCAPLUS

DOCUMENT NUMBER: 52:20843

ORIGINAL REFERENCE NO.: 52:3687c-h

TITLE: Synthesis of phosphatidyl peptides. I.
O-(Distearoyl-L- α -glycerylphosphoryl)-L-serylglycylglycine

AUTHOR(S): Baer, Erich; Maurukas, Jonas; Clarke, Donald D.

CORPORATE SOURCE: Univ. Toronto, Can.

SOURCE: Journal of Biological Chemistry (1957), 228, 181-91
CODEN: JBCHA3; ISSN: 0021-9258

DOCUMENT TYPE: Journal

LANGUAGE: Unavailable

AB cf. C.A. 50, 811f; 51, 3452b. A phosphatidyl tripeptide, O-(distearoyl-L- α -glycerylphosphoryl)-L-serylglycylglycine (I), was prepared in 12% over-all yield by phosphorylation of D- α - β -distearin (II) with PhOP(O)Cl₂ (III) and pyridine to give distearoyl-L- α -glycerylphenylphosphoryl chloride (IV), or esterification of IV with N-carbobenzyloxy-L-serylglycylglycine benzyl ester (V) in the presence of lutidine, or removal of the protective groups by catalytic hydrogenolysis. The synthesis of V was simplified by condensing N-carbobenzyloxy-L-serine (VI) with glycylglycine benzyl ester (VII) by means of N,N'-dicyclohexylcarbodiimide (VIII). I is cleaved by CH₂N₂ with the formation of di-Me distearoyl-L- α -glycerophosphate (IX). This reaction suggests that CH₂N₂ may be useful in elucidating the structure of natural **lipopeptides** and lipoproteins. VII.HCl (3.6 g.) and 3 cc. Et₃N in 30 cc. CHCl₃ treated with 3.3 g. VI in 30 cc. MeCN and 3.0 g. VIII in 9 cc. CHCl₃, the mixture held overnight at room temperature, diluted with 75 cc. CH₂Cl₂, filtered, the solid suspended in 75 cc. (MeOCH₂)₂, centrifuged, the **precipitate** reextd., and the combined exts. diluted with 300 cc. petr. ether yielded 3.6 g. V, m. 150-2°. III (1.68 g.), 1.24 g. quinoline, and 25 cc. CHCl₃ treated dropwise at 25° during 2.5 hrs. with 5.0 g. II (cf. C.A. 47, 3234e), the product after 1 hr. treated rapidly at 45° with 3.55 g. V in 45 cc. lutidine, the solution concentrated in vacuo below 50°, the residue extracted with 50 cc. petr. ether (b. 30-60°), the mixture separated by centrifugation, the extraction repeated 4 times, the combined exts. concentrated to **dryness** in vacuo, the residue washed in 75 cc. CHCl₃ with 20-cc. portions of 1.5N H₂SO₄ then with H₂O, the dried CHCl₃ solution concentrated in vacuo, the residue (7 g.) in 100 cc. hot Me₂CO allowed to cool to 25°, the **precipitate** centrifuged, washed with Me₂CO, the mother liquor and washings concentrated in vacuo, the residue **dissolved** in 50 cc. hot petr. ether, the solution held overnight at room temperature, centrifuged, and the supernatant liquid chromatographed yielded 1.2 g. of mostly bis(distearoyl-L- α -glyceryl) phenyl phosphate and 1.8 g. distearoyl-L- α -glycerylphenylphosphoryl-N-carbobenzyloxy-L-serylglycylglycine (X). X (1.8 g.) in 50 cc. lukewarm AcOH containing 0.5 g. Pt oxide and 0.5 g. Pd black hydrogenated under 50 cm. H₂O pressure, the mixture warmed to 65°, centrifuged, the supernatant solns. held 1 hr. at 6°, filtered, and the solid triturated with CHCl₃ yielded 0.77 g. I, m. 181-2° (decomposition), [α]_D 7.6 0.2° (c 5, CHCl₃). Hydrogenolysis of V yielded 80% L-serylglycylglycine, [α]_{25D} 31.8° (c 5.6, N HCl), [α]_{27D} 34.0° (water). IX m. 50-1°.

Kosar 10/024,405

14/10/2004

=> d que stat l16

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L1      1 SEA FILE=REGISTRY ABB=ON  DAPTOMYCIN/CN
L2      2349 SEA FILE=HCAPLUS ABB=ON  ?LIPOPEPTID? OR L1 OR ?DAPTOMYCIN? OR
        A54145 OR A(W)54145
L3      100 SEA FILE=HCAPLUS ABB=ON  L2 AND (?DISSOLV? OR ?CRYSTAL? OR
        ?PRECIP?)
L4      10 SEA FILE=HCAPLUS ABB=ON  L3 AND (?COLLECT? OR DRY? OR ?STOR?)
L5      6 SEA FILE=HCAPLUS ABB=ON  L4 AND (?STABIL? OR ?STABL? OR
        ?AMORPH? OR ?MANUF? OR ?PROCES? OR ?PROCED?)
L6      2 SEA FILE=HCAPLUS ABB=ON  L4 AND (?METHOD? OR ?TECHNIQ?)
L7      10 SEA FILE=HCAPLUS ABB=ON  L4 OR L5 OR L6
L8      12 SEA L7
L9      9 DUP REMOV L8 (3 DUPLICATES REMOVED)
L15     4 SEA L9 AND (ALCOHOL? OR POLYHYDRIC?)
L16     9 SEA L9 OR L15

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=> d ibib abs l16 1-9

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L16 ANSWER 1 OF 9      MEDLINE on STN
ACCESSION NUMBER:      2003186452      MEDLINE
DOCUMENT NUMBER:       PubMed ID: 12705595
TITLE:                 Detection of cyclic lipopeptide biomarkers from
                        Bacillus species using atmospheric pressure matrix-assisted
                        laser desorption/ionization mass spectrometry.
AUTHOR:                Madonna Angelo J; Voorhees Kent J; Taranenko Nelli I; Laiko
                        Victor V; Doroshenko Vladimir M
CORPORATE SOURCE:      Department of Chemistry, Colorado School of Mines, Golden,
                        Colorado 80401, USA.
CONTRACT NUMBER:       2R44RR153-31-02 (NCRR)
SOURCE:                Analytical chemistry, (2003 Apr 1) 75 (7) 1628-37.
                        Journal code: 0370536. ISSN: 0003-2700.
PUB. COUNTRY:          United States
DOCUMENT TYPE:          Journal; Article; (JOURNAL ARTICLE)
LANGUAGE:               English
FILE SEGMENT:           Priority Journals
ENTRY MONTH:            200308
ENTRY DATE:             Entered STN: 20030423
                        Last Updated on STN: 20030808
                        Entered Medline: 20030807

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AB A novel approach to microbial detection using atmospheric pressure matrix-assisted laser desorption/ionization with an ion trap mass spectrometer to analyze whole cell bacteria is introduced. This new approach was tested with lyophilized spores and cultures of *Bacillus globigii* (BG) grown on agar media for 4 days or longer. At each stage of growth, it was found that biomarkers, identified as cyclic **lipopeptides** known as fengycin and surfactin, could be detected by pulsed ultraviolet laser irradiation of intact BG cells (approximately 5 mg) **cocrystallized** with alpha-cyano-4-hydroxycinnamic acid. Furthermore, definitive amino acid sequence information was obtained by performing tandem mass spectrometry on the precursor ions of the cyclic **lipopeptides**. The investigation was broadened to include the examination of aerosolized BG spores **collected** from the atmosphere and directly deposited onto double-sided tape. Subsequent analysis of the recovered spores resulted in the production of mass peaks consistent with fengycin. Other *Bacillus* species were analyzed for comparison and showed mass spectral peaks also identified as originating from various cyclic **lipopeptides**. Further studies were conducted using a pulsed infrared laser as the excitation source to analyze BG cells (approximately 5 mg) suspended in a matrix of 0.03 M

ammonium citrate and glycerol resulting in the production of ions characteristic of fengycin and surfactin.

L16 ANSWER 2 OF 9 MEDLINE on STN
 ACCESSION NUMBER: 87069748 MEDLINE
 DOCUMENT NUMBER: PubMed ID: 3538372
 TITLE: Chemical composition of antigen 60 from Mycobacterium bovis BCG.
 AUTHOR: Fabre I; L'Homme O; Bruneteau M; Michel G; Cocito C
 SOURCE: Scandinavian journal of immunology, (1986 Nov) 24 (5) 591-602.
 Journal code: 0323767. ISSN: 0300-9475.
 PUB. COUNTRY: ENGLAND: United Kingdom
 DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
 LANGUAGE: English
 FILE SEGMENT: Priority Journals
 ENTRY MONTH: 198612
 ENTRY DATE: Entered STN: 19900302
 Last Updated on STN: 19900302
 Entered Medline: 19861224

AB Antigen 60 (A60), the main **thermostable** immunogen of tuberculin and PPD, has been purified from Mycobacterium bovis BCG cytoplasm, and identified by crossed immunoelectrophoresis with anti-BCG polyclonal antiserum. Two A60 fractions, free lipids and lipid-conjugated compounds, have been recognized. The free lipids represented about 30% (dry weight), and consisted essentially of C16-C18 fatty acids, and of phosphatidyl-inositol-mannosides. Lipoconjugates, upon DEAE-cellulose chromatography and gel filtration, yielded two main fractions of neutral and polar components. Chromatography of delipidated and deproteinized A60 on Sephadex G-100 yielded: a high molecular weight fraction (A1, 18%, a lipoglucon of congruent to 10(6)), and a low molecular weight fraction (B, 10%, a **lipopeptidoglycan** of congruent to 10(4)) containing mannose, glucose, and small amounts of arabinose. The polysaccharide moieties of fractions A1 and B were submitted to acetylation, methylation, and acid hydrolysis, and the structure of the hydrolysed polymer was deduced by combined gas chromatography/mass spectrometry analysis. The results indicated a branched structure involving 1,4-, 1,6-, and 1,4,6-linked D-gluco- or D-manno-pyranosyl residues. Glucan- and peptidoglycan-bound fatty acids were identified as saturated (C16-C18) and monounsaturated linear acids (C12-C18). Immunodiffusion on agarose gel indicated that delipidation and proteolysis did not suppress the ability of A60 to yield **immunoprecipitates** with anti-A60 antiserum. The high polymer fractions obtained by chromatography on DEAE cellulose and Sephadex G-100 were also reactive. It is concluded that A60 is made of free lipids and of **lipopeptidoglycans** of high molecular weights (10(6)-10(7)) endowed with immunogenic properties.

L16 ANSWER 3 OF 9 EMBASE COPYRIGHT 2004 ELSEVIER INC. ALL RIGHTS RESERVED.
 on STN
 ACCESSION NUMBER: 2001091824 EMBASE
 TITLE: New **lipopeptides** from the Caribbean cyanobacterium Lyngbya majuscula.
 AUTHOR: Jimenez J.I.; Scheuer P.J.
 CORPORATE SOURCE: P.J. Scheuer, Chemistry Department, University of Hawaii, Honolulu, HI 96822-2275, United States.
 scheuer@gold.chem.hawaii.edu
 SOURCE: Journal of Natural Products, (2001) 64/2 (200-203).
 Refs: 24
 ISSN: 0163-3864 CODEN: JNPRDF
 COUNTRY: United States

DOCUMENT TYPE: Journal; Article
FILE SEGMENT: 004 Microbiology
LANGUAGE: English
SUMMARY LANGUAGE: English

AB Four new metabolites have been isolated from a marine red cyanobacterium, *Lyngbya majuscula*, collected at Boca del Drago Beach, Bocas del Toro, Panama. The planar structures were elucidated by 1D and 2D NMR techniques. These compounds were assigned the trivial names pseudodysidenin (2), dysidenamide (3), nordysidenin (4), and dragonamide (7).

L16 ANSWER 4 OF 9 WPIDS COPYRIGHT 2004 THE THOMSON CORP on STN

ACCESSION NUMBER: 2003-598353 [56] WPIDS

DOC. NO. CPI: C2003-162413

TITLE: New **amorphous** and **crystalline** polymorphs of sodium 4-((4-chloro-2-hydroxybenzoyl)amino)butanoate useful for delivery of active agents e.g. insulin.

DERWENT CLASS: B04 B05 B07 D16

INVENTOR(S): BHANDARKAR, S; LEUCHYK, H; MAJURU, S

PATENT ASSIGNEE(S): (EMIS-N) EMISPHERE TECHNOLOGIES INC

COUNTRY COUNT: 102

PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
WO 2003057650	A2	20030717	(200356)*	EN	41
RW: AT BE BG CH CY CZ DE DK EA EE ES FI FR GB GH GM GR HU IE IT KE LS					
LU MC MW MZ NL OA PT SD SE SI SK SL SZ TR TZ UG ZM ZW					
W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK					
DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR					
KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ OM PH PL PT					
RO RU SC SD SE SG SK SL TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA					
ZM ZW					
AU 2003223158	A1	20030724	(200421)		

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 2003057650	A2	WO 2003-US878	20030109
AU 2003223158	A1	AU 2003-223158	20030109

FILING DETAILS:

PATENT NO	KIND	PATENT NO
AU 2003223158	A1 Based on	WO 2003057650

PRIORITY APPLN. INFO: US 2002-347610P 20020109

AN 2003-598353 [56] WPIDS

AB WO2003057650 A UPAB: 20030903

NOVELTY - **Crystalline** polymorphs of anhydrous, hemihydrate, isopropanol solvate or pentahydrate sodium 4-((4-chloro-2-hydroxybenzoyl)amino)butanoate (sodium 4-CNAB) exhibiting X-ray powder diffraction patterns as given in the specification, and **amorphous** sodium 4-CNAB are new.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are included for the following:

(1) a composition comprising **crystalline** polymorph of

anhydrous, hemihydrate, isopropanol solvate or pentahydrate form of sodium 4-CNAB, or **amorphous** sodium 4-CNAB and a biological agent;

(2) a dosage unit form comprising the composition and an excipient, diluent, disintegrant, lubricant, plasticizer, colorant, and/or a dosing vehicle; and

(3) **methods** of preparing forms (I) - (IV) of sodium 4-CNAB and **amorphous** sodium 4-CNAB.

USE - The compounds are used for administering active agents.

ADVANTAGE - The anhydrous/hemihydrate/isopropanol solvate/pentahydrate polymorphs of sodium 4-CNAB have melting point onsets as determined by differential scanning calorimetry at 215.07 or 222.02/214.24/223.08/213.05 deg. C respectively. The polymorphs improve the bioavailability of active agent compare to administration of the active agent without the delivery agent.

Dwg.0/28

L16 ANSWER 5 OF 9 WPIDS COPYRIGHT 2004 THE THOMSON CORP on STN
 ACCESSION NUMBER: 2003-596426 [56] WPIDS
 CROSS REFERENCE: 2002-583668 [62]; 2002-599761 [64]; 2003-167264 [16]
 DOC. NO. CPI: C2003-161476
 TITLE: Preparation of **daptomycin** useful for treating bacterial infections comprises **crystallizing amorphous** **daptomycin** from solution comprising cation from salt, buffer, organic **precipitant** and low molecular weight **alcohol**.
 DERWENT CLASS: A96 B05
 INVENTOR(S): GOVARDHAN, C; KEITH, D; KHALAF, N
 PATENT ASSIGNEE(S): (GOVA-I) GOVARDHAN C; (KEIT-I) KEITH D; (KHAL-I) KHALAF N
 COUNTRY COUNT: 1
 PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
US 2003045484	A1	20030306	(200356)*		21

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
US 2003045484	A1	Provisional	US 2000-256268P
		Provisional	US 2001-274741P
		Provisional	US 2001-340525P
		Provisional	US 2001-341315P
			US 2001-24701

PRIORITY APPLN. INFO: US 2001-24701 20011217; US
 2000-256268P 20001218; US
 2001-274741P 20010309; US
 2001-340525P 20011213; US
 2001-341315P 20011213

AN 2003-596426 [56] WPIDS
 CR 2002-583668 [62]; 2002-599761 [64]; 2003-167264 [16]
 AB US2003045484 A UPAB: 20040418

NOVELTY - Preparation of **daptomycin** comprises **crystallizing amorphous** **daptomycin** from a solution (S1) comprising a cation from a salt, buffer, organic **precipitant** and a low molecular weight **alcohol**.

DETAILED DESCRIPTION - An INDEPENDENT CLAIM is included for preparing

(P1) a **crystalline** or **crystal-like daptomycin** which comprises **crystallizing** or **precipitating daptomycin** from a solution (S2) comprising **daptomycin**, a salt containing monovalent or divalent cation, a pH buffering agent and a low molecular weight or **polyhydric alcohol**.

ACTIVITY - Antibacterial.

No biological tests or results are given.

MECHANISM OF ACTION - None given.

USE - Used for the preparation of **daptomycin** in the form of urchin-like, cluster of needle, or rod-like **crystals** (claimed) useful in formulating pharmaceutical compositions for treating bacterial infections, and for preparation of bulk sterile products.

ADVANTAGE - The **daptomycin** has a starting purity of at least 90 (preferably at least 93)% or a purity before **crystallization** or **precipitation** of upto 90% and after **crystallization** or **precipitation** of at least 95-98%. The **method** is simple and robust for large-scale and/or commercial production of **daptomycin**.

Dwg.0/9

L16 ANSWER 6 OF 9 WPIDS COPYRIGHT 2004 THE THOMSON CORP on STN
 ACCESSION NUMBER: 2003-167264 [16] WPIDS
 CROSS REFERENCE: 2002-583668 [62]
 DOC. NO. CPI: C2003-043400
 TITLE: New **crystalline** form of **daptomycin**
 useful for treating e.g. complicated skin and soft tissue infections, endocarditis and bacteremia.
 DERWENT CLASS: A96 B02 D21
 INVENTOR(S): GOVARDHAN, C; KHALAH, N; KHALAF, N
 PATENT ASSIGNEE(S): (ALTU-N) ALTUS BIOLOGICS INC; (ALTU-N) ALTUS PHARM INC;
 (CUBI-N) CUBIST PHARM INC; (GOVA-I) GOVARDHAN C; (KHAL-I) KHALAF N
 COUNTRY COUNT: 100
 PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
WO 2002096936	A2	20021205	(200316)	*	EN
RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ					
NL OA PT SD SE SL SZ TR TZ UG ZM ZW					
W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK					
DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR					
KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ OM PH PL PT					
RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW					
US 2002111311	A1	20020815	(200316)	14	
EP 1383794	A2	20040128	(200409)	EN	
R: AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT					
RO SE SI TR					
AU 2002253813	A1	20021209	(200452)		

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 2002096936	A2	WO 2001-US49167	20011218
US 2002111311	A1	US 2000-256268P	20001218
	Provisional	US 2001-274741P	20010309
		US 2001-24405	20011218
EP 1383794	A2	EP 2001-270136	20011218
		WO 2001-US49167	20011218

AU 2002253813 A1

AU 2002-253813

20011218

FILING DETAILS:

PATENT NO	KIND	PATENT NO
EP 1383794	A2 Based on	WO 2002096936
AU 2002253813	A1 Based on	WO 2002096936

PRIORITY APPLN. INFO: US 2001-274741P 20010309; US
 2000-256268P 20001218; US
 2001-24405 20011218

AN 2003-167264 [16] WPIDS

CR 2002-583668 [62]

AB WO 200296936 A UPAB: 20040920

NOVELTY - **Crystalline** form of **daptomycin** is new.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for:

- (1) a **lipopeptide** in **crystalline** form selected from **daptomycin** and A-21978C analogs;
- (2) a pharmaceutical composition comprising the **lipopeptide** and optionally a carrier;
- (3) a container comprising the composition and optionally a buffer
- (4) a formulation comprising the **lipopeptide**;
- (5) a **method** for the preparation of the **crystalline** form of a **lipopeptide** comprising combining the **lipopeptide** with **crystallization** solution having at least one cation and at least one **alcohol** selected from **polyhydric alcohols** and/or low molecular weight **alcohols**. The **lipopeptide** is selected from **daptomycin** and its analogs;
- (6) a **method** for treating a disease caused by a gram-positive pathogen comprising administering the composition;
- (7) a **method** of administering the **crystalline lipopeptide** or its salt in a composition with a carrier to a subject;
- (8) a **method** of **storing** a **lipopeptide** selected from **daptomycin** and A-21978C analog comprising preparing the **lipopeptide** in **crystalline** form and **storing** the **crystalline lipopeptide**; and
- (9) a **method** of preparing the **lipopeptide** selected from **daptomycin** and A-21978C comprising preparing the **lipopeptide** in **crystalline** form.

ACTIVITY - Antibacterial; Antiinflammatory.

MECHANISM OF ACTION - None given.

USE - As a food composition, a feed composition, veterinary composition, a cosmetic composition or personal care composition (e.g. washing formulation, soap, shampoo, deodorant, perfume, cologne or antiperspirant), for treating a disease caused by a gram-positive pathogen e.g. complicated skin and soft tissue infections, community-acquired pneumonia, complicated urinary tract infections, enterococcal infections, endocarditis and bacteremia (all claimed).

ADVANTAGE - The **crystalline** form provides alternate modes of delivery and control of dosage.

Dwg.0/0

L16 ANSWER 7 OF 9 WPIDS COPYRIGHT 2004 THE THOMSON CORP on STN

ACCESSION NUMBER: 2002-682742 [73] WPIDS

DOC. NO. CPI: C2002-192603

TITLE: Use of an aminoglycoside for the treatment of lysosomal storage disease e.g. Hurley syndrome.

DERWENT CLASS: B03 D16
 INVENTOR(S): BEDWELL, D M; KEELING, K M
 PATENT ASSIGNEE(S): (UABR-N) UAB RES FOUND
 COUNTRY COUNT: 89
 PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
WO 2002065989	A2	20020829	(200273)*	EN	54
RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TR TZ UG ZM ZW W: AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT UA UG US UZ VN YU ZA ZW					
EP 1368039	A2	20031210	(200382)	EN	
R: AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT RO SE SI TR					
AU 2002240417	A1	20020904	(200427)		
JP 2004522763	W	20040729	(200452)		81

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 2002065989	A2	WO 2002-US4842	20020220
EP 1368039	A2	EP 2002-706325	20020220
		WO 2002-US4842	20020220
AU 2002240417	A1	AU 2002-240417	20020220
JP 2004522763	W	JP 2002-565550	20020220
		WO 2002-US4842	20020220

FILING DETAILS:

PATENT NO	KIND	PATENT NO
EP 1368039	A2 Based on	WO 2002065989
AU 2002240417	A1 Based on	WO 2002065989
JP 2004522763	W Based on	WO 2002065989

PRIORITY APPLN. INFO: US 2001-270092P 20010220

AN 2002-682742 [73] WPIDS

AB WO 200265989 A UPAB: 20021113

NOVELTY - Treatment of lysosomal **storage** disease involves administration of an aminoglycoside.

ACTIVITY - Cardiant, Hepatotropic, Auditory, Nootropic.

To determine if aminoglycoside-mediated suppression of stop mutations can **restore** a level of alpha -L-iduronidase activity that is sufficient to reduce glycosaminoglycan accumulation, normal and Hurler Q70X/W402X fibroblasts were cultured with 35S04 for 3 days to label the sulfated glycosaminoglycans synthesized during this period. The cells were then cultured in medium lacking 35S04 for 2 days in the presence or absence of gentamycin. After this chase period, the glycosaminoglycans were **precipitated** and total 35S incorporated was quantified. Untreated Hurler fibroblasts accumulated almost 4-fold more 35S- labelled glycosaminoglycans than normal fibroblasts. The counts in the gentamycin-treated Hurler fibroblasts were reduced to a level similar to that observed in normal fibroblasts. The results indicate that the low level of alpha -L-iduronidase activity **restored** by gentamycin treatment can dramatically reduce the steady-state glycosaminoglycan level

in Hurler fibroblasts.

The effect of poly-L-aspartate on the aminoglycoside-mediated suppression of stop codons was studied. The co-administration of poly-L-aspartate with gentamycin did not affect the level of readthrough at low gentamycin concentrations, but poly-L-aspartate increased the alpha-L-iduronidase activity by 60-70% in Hurler fibroblasts at high gentamycin concentrations.

MECHANISM OF ACTION - Gene Therapy.

USE - For the treatment of lysosomal **storage** disease e.g. mucopolysaccharidosis I (e.g. Scheie disease, Hurler syndrome) and Batten disease (claimed).

ADVANTAGE - The aminoglycoside suppresses a naturally occurring premature stop mutation, such as IDUA-Q70X stop mutation and IDUA-W402X stop mutation without inducing the toxic side effects associated with aminoglycosides.

Dwg.0/7

L16 ANSWER 8 OF 9 WPIDS COPYRIGHT 2004 THE THOMSON CORP on STN

ACCESSION NUMBER: 2002-599761 [64] WPIDS

CROSS REFERENCE: 2002-583668 [62]

DOC. NO. CPI: C2002-169581

TITLE: **Crystalline or crystal-like lipopeptide** useful for treating bacterial infections includes **daptomycin, A54145** or a **daptomycin-related lipopeptide**.

DERWENT CLASS: B04 C07 D13 D21 D22 D25 J04

INVENTOR(S): KEITH, D; LAI, J; GOVARDHAN, C; KHALAF, N

PATENT ASSIGNEE(S): (CUBI-N) CUBIST PHARM INC; (GOVA-I) GOVARDHAN C; (KEIT-I) KEITH D; (KHAL-I) KHALAF N; (LAIJ-I) LAI J

COUNTRY COUNT: 101

PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
WO 2002059145	A1	20020801	(200264)*	EN	69
RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TR TZ UG ZM ZW					
W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ OM PH PL PT RO RU SD SE SG SI SK SL TJ TM TN TR TT TZ UA UG US UZ VN YU ZA ZW					
US 2003045678	A1	20030306	(200320)		
EP 1343811	A1	20030917	(200362)	EN	
R: AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT RO SE SI TR					
AU 2002246687	A1	20020806	(200427)		
JP 2004525108	W	20040819	(200455)		106

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 2002059145	A1	WO 2001-US48886	20011217
US 2003045678	A1	Provisional	US 2000-256268P
		Provisional	US 2001-274741P
		Provisional	US 2001-340525P
		Provisional	US 2001-341315P
			US 2001-23517
EP 1343811	A1	EP 2001-994272	20011217
		WO 2001-US48886	20011217

AU 2002246687	A1	AU 2002-246687	20011217
JP 2004525108	W	WO 2001-US48886	20011217
		JP 2002-559447	20011217

FILING DETAILS:

PATENT NO	KIND	PATENT NO
EP 1343811	A1 Based on	WO 2002059145
AU 2002246687	A1 Based on	WO 2002059145
JP 2004525108	W Based on	WO 2002059145

PRIORITY APPLN. INFO: US 2001-341315P 20011213; US
 2000-256268P 20001218; US
 2001-274741P 20010309; US
 2001-340525P 20011213; US
 2001-23517 20011217

AN 2002-599761 [64] WPIDS
 CR 2002-583668 [62]
 AB WO 200259145 A UPAB: 20040826

NOVELTY - A **crystalline** or **crystal-like lipopeptide** (A) or its salt includes **daptomycin**, **A54145** or a **daptomycin-related lipopeptide** (preferably **daptomycin**).

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for:

(1) a container comprising the composition containing (A) and a carrier;

(2) **storing** (A) involving providing a **dissolved** solution of a **lipopeptide**, **crystallizing** or **precipitating** the **lipopeptide**, **collecting** and **drying** the **lipopeptide** and **storing** the **lipopeptide**, where (A) is more **stable** than its **amorphous** form; and

(3) **manufacturing** (A) involving providing an **amorphous** form of a **lipopeptide**, **crystallizing** or **precipitating** the **lipopeptide** and **collecting** the **crystalline** or **crystal-like lipopeptide**.

ACTIVITY - Antibacterial; Antiarthritic; Antiinflammatory; Gynecological.

MECHANISM OF ACTION - None given.

USE - In a pharmaceutical, food, feed, veterinary (e.g. soap, shampoo or pharmaceutical composition), cosmetic or personal care formulation (e.g. washing formulation, soap, shampoo or antiperspirant) (claimed) for treating bacterial infections e.g. gram positive bacterial infection of any organ or tissue in the body; for treating endocarditis, intra-abdominal infections, pneumonia, bone and joint infections and obstetrical/gynecological infection, nephritis, septic arthritis and osteomyelitis.

ADVANTAGE - The **crystalline daptomycin** has higher purity than the **amorphous** form. The **amorphous** form has purity of 90 or 93 % and (A) has purity of at least 95 (preferably 98) % and contains no single impurity greater than 1 % measured by HPLC. (A) Exhibits a higher **stability** (measured by antibiotic activity or degradation of **lipopeptide** antibiotic) to heat, light, degradation or humidity than its **amorphous** form and exhibits lower conversion to anhydro-**daptomycin** or beta -isomer of **daptomycin** than the **amorphous** form of **daptomycin**.
 . The carrier enhances the oral availability of **daptomycin**. An X-ray diffraction pattern of the **crystalline daptomycin**

, using a Cu (λ = 1.54 deg. A) X-ray source, has a diffraction angle (2 theta) = 10.9, 19.2 and 23.3 (deg.) or a diffraction angle (2 theta) = 19.2, 23.2, 23.4 and 23.6 (deg.). The **crystal**-like **daptomycin** has **crystalline** characteristics by birefringence but does not have **crystalline** characteristics by X-ray powder diffraction.

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ACCESSION NUMBER: 2002-583668 [62] WPIDS
 CROSS REFERENCE: 2002-599761 [64]; 2003-167264 [16]
 DOC. NO. CPI: C2002-165080
 TITLE: Purification of **daptomycin** useful in preparation of sterile products involves **crystallizing amorphous** **daptomycin** using solution comprising a cation from salt, buffer, **precipitant** and low molecular weight **alcohol**.
 DERWENT CLASS: B02
 INVENTOR(S): GOVARDHAN, C; KEITH, D; KHALAF, N
 PATENT ASSIGNEE(S): (ALTU-N) ALTUS BIOLOGICS INC; (CUBI-N) CUBIST PHARM INC; (GOVA-I) GOVARDHAN C; (KEIT-I) KEITH D; (KHAL-I) KHALAF N
 COUNTRY COUNT: 99
 PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
WO 2002056829	A2	20020725	(200262)*	EN	41
RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ					
NL OA PT SD SE SL SZ TR TZ UG ZM ZW					
W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK					
DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR					
KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PH PL PT RO					
RU SD SE SG SI SK SL TJ TM TN TR TT TZ UA UG US UZ VN YU ZA ZM ZW					
US 2003045484	A1	20030306	(200356)		21
KR 2003081353	A	20031017	(200413)		
AU 2002246688	A1	20020730	(200427)		

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 2002056829	A2	WO 2001-US48887	20011217
US 2003045484	A1	Provisional	US 2000-256268P
		Provisional	US 2001-274741P
		Provisional	US 2001-340525P
		Provisional	US 2001-341315P
			US 2001-24701
KR 2003081353	A	KR 2003-708117	20030618
AU 2002246688	A1	AU 2002-246688	20011217

FILING DETAILS:

PATENT NO	KIND	PATENT NO
AU 2002246688	A1 Based on	WO 2002056829

PRIORITY APPLN. INFO: US 2001-341315P 20011213; US
 2000-256268P 20001218; US
 2001-274741P 20010309; US

2001-340525P 20011213; US
2001-24701 20011217

AN 2002-583668 [62] WPIDS
CR 2002-599761 [64]; 2003-167264 [16]
AB WO 200256829 A UPAB: 20040426

NOVELTY - Purification of **daptomycin** involves **crystallizing amorphous daptomycin** using solution comprising a cation from salt, buffer, organic **precipitant** and low molecular weight **alcohol**.

USE - In the purification of **daptomycin** (claimed), which is used in the preparation of pharmaceutical composition for treating bacterial infections (preferably gram-positive bacteria) and sterile product, particularly bulk sterile product.

ADVANTAGE - The **daptomycin** has a purity before **crystallizing** or **precipitating** of less than 90 (preferably 40, especially 10)% and has purity after **crystallizing** or **precipitating** of least 95 (preferably 96, especially 98)%. The **process** is simple and can be used for large-scale commercial production.
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